

TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

MEETING MATERIALS

August 7, 2009

CALTRANS

BAY AREA TOLL AUTHORITY

CALIFORNIA TRANSPORTATION COMMISSION















Letter of Transmittal

DATE: July 30, 2009

TO: Toll Bridge Program Oversight Committee

(TBPOC)

FR: Program Management Team (PMT)

RE: TBPOC Meeting Materials Packet – August 7, 2009

Herewith is the <u>TBPOC Meeting Materials Packet</u> for the August 7th meeting. The packet includes memoranda and reports that will be presented at the meeting. A <u>Table of Contents</u> is provided following the <u>Agenda</u> to help locate specific topics.



Revised Final Agenda

TBPOC MEETING August 7, 2009, 10:00 am – 11:00 am Mission Bay Office, Conference Room 1906, 325 Burma Road, Pier 7, Oakland

1.		Presenter	Time	Desired Outcome
1.	TBPOC CHAIR	S. Maller, CTC	5 min	Approval
2.	a. TBPOC July 15, 2009 Meeting Minutes*	J. Weinstein, BATA	1 min	Approval
	 b. Yerba Buena Island Detour Contract Change Order (CCO): 1) CCO 184-S1 (ETI Truss Fabrication Impacts)* 	D. Noel, CTC	2 min	Approval
	c. Yerba Buena Island Transition Structures No. 11) Addendum No. 6*	T. Anziano, CT	2 min	Approval
3.	PROGRESS REPORTS a. TBSRP Draft 2 nd Quarter 2009 Project Progress and Financial Update**	J. Weinstein, BATA	5 min	Approval
4.	SAN FRANCISCO-OAKLAND BAY BRIDGE UPDATES			
	a. Bridge Light Poles*	T. Anziano, CT	5 min	Approval
	 b. Self-Anchored Suspension Superstructure 1) TBPOC China & Canada Visit Preparations* 	PMT	40 min	Information
5.	OTHER BUSINESS			

Next TBPOC Meeting: September 2, 2009, 10:00 AM – 1:00 PM Public Information Office, 355 Burma Road, Pier 7, Oakland

^{*}Attachments

^{**}Stand-alone document included in the binder



Table of Contents

TBPOC MEETING August 7, 2009

INDEX TAB	AGENDA ITEM	DESCRIPTION
1	1	TBPOC CHAIR*
2	2	 consent calendar a. TBPOC July 15, 2009 Meeting Minutes* b. Yerba Buena Island Detour Contract Change Order (CCO): 1) CCO I84-S1 (ETI Truss Fabrication Impacts)* c. Yerba Buena Island Transition Structures No. 1 1) Addendum No. 6*
3	3	PROGRESS REPORTS a. TBSRP Draft 2 nd Quarter 2009 Project Progress and Financial Update**
4	4	SAN FRANCISCO-OAKLAND BAY BRIDGE UPDATES a. Bridge Light Poles* b. Self-Anchored Suspension Superstructure 1) TBPOC China & Canada Visit Preparations*
5	5	OTHER BUSINESS

^{*}Attachments

^{**}Stand-alone document included in the binder



Memorandum

TO: Toll Bridge Program Oversight Committee DATE: July 30, 2009

(TBPOC)

FR: Stephen Maller, Deputy Director, CTC

RE: Agenda No. - 1

Item- TBPOC Chair

Recommendation:

APPROVAL

Cost:

N/A

Schedule Impacts:

N/A

Discussion:

On November 21, 2005, the TBPOC approved the "Agreement on Committee Procedures for the Toll Bridge Program Oversight Committee." This Agreement is non-binding.

The Agreement states in Section II, Part B (Chairperson):

"The Committee will select a Chairperson. The Chairperson position will rotate between the members affiliated with the Establishing Agencies for every two years. The Chairperson shall preside over the meetings of the Committee and shall perform all other duties incident to the position or as assigned to him or her by the Committee."

In June 2007, the TBPOC elected to appoint Will Kempton as Chairperson for the duration of his tenure as the Director of the Department. Now that Director Kempton has resigned, the TBPOC needs to elect a new chairperson. Per the Agreement, the Establishing Agencies are the Department and the Authority. Unless the TBPOC chooses to amend the Agreement to include the Commission, the Director of the Department and the Executive Director of the Authority are eligible for nomination to the chairperson position.

A copy of the currently approved Agreement is attached.



Memorandum

Attachment(s):

Agreement on Committee Procedures for the Toll Bridge Program Oversight Committee

AGREEMENT ON COMMITTEE PROCEDURES FOR THE TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

This Agreement is entered into and effective this 9th day of November, 2005, by and among the Director of the California Department of Transportation, (the "Department"), the Executive Director of the Bay Area Toll Authority (the "Authority") and the Executive Director of the California Transportation Commission (the "Commission"), for the purpose of outlining the roles and areas of responsibility set out in Chapter 71, Statutes of 2005, related to the duties and responsibilities of the Toll Bridge Program Oversight Committee. The Department, Authority and Commission are collectively referred to as the "Agencies."

RECITALS

WHEREAS, the California Streets and Highways Code (SHC) Section 330952.1 requires the Department and Authority hereinafter referred to collectively as the "Establishing Agencies," to establish a Toll Bridge Program Oversight Committee, hereinafter referred to as the "Committee," consisting of the Director of the Department, the Executive Director of the Authority and the Executive Director of the Commission, hereinafter collectively referred to as the "Committee Members;" and

WHEREAS, the Committee Members desire to establish an agreement outlining their roles and responsibilities in carrying out the work of the Committee;

NOW, THEREFORE, the Committee Members hereto agree as follows:

I. TERM.

The term of this Agreement shall commence when fully executed, and unless amended earlier, shall terminate when the Bridge Projects have been accepted by the Department, the Bridge Projects contractor claims have been resolved through settlement or public works arbitration and environmental mitigation has been concluded.

II. TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE MANAGEMENT AND ORGANIZATION

A. Committee Members Qualifications

In the event a Committee Member, for whatever reason, no longer serves in his or her Director's position with his or her respective Agency, the Committee

Member shall be replaced by his or her successor or acting successor, as determined by that Committee Member's Agency.

B. Chairperson

The Committee will select a Chairperson. The Chairperson position will rotate between the members affiliated with the Establishing Agencies every two years. The Chairperson shall preside over the meetings of the Committee and shall perform all other duties incident to the position or as assigned to him or her by the Committee.

C. Decision-making

The Committee will endeavor to make decisions on a consensus basis. When a vote by the Committee is necessary, a majority vote of Committee Members is required to approve an item. Every act or decision made by the majority vote of the Committee Members is an act of the Committee. A quorum of the Committee is two. A meeting at which all the Committee Members are initially present may continue to make decisions and transact business not withstanding the withdrawal of one of its members.

D. Responsibilities

The Committee will:

- 1. Provide oversight and financial direction for the Bridge Projects.
- 2. Review and approve project reporting of the Bridge Projects status, program costs and schedules and provide reports to the Authority on a monthly basis.
- 3. Approve all contracts for project oversight and control for the Bridge Projects.
- 4. Review and recommend for approval contract specifications and bid documents for the Bridge Projects.
- 5. Resolve project budget issues and review and recommend budget and fund allocation adjustments.
- 6. Evaluate Bridge Project changes and review and approve significant change orders and claims over one million dollars (\$1,000,000).
- 7. Develop and regularly update cost estimates, risk assessment, and cash flow requirements for all phases of the Bridge Projects.
- 8. Review staffing structures and levels for the Bridge Projects.
- 9. Review and approve consultant and contractor services related to the oversight duties of the Committee for the Bridge Projects.

- 10. Report to the Transportation and Fiscal committees of both houses of the Legislature and the Commission on a quarterly basis, as specified in SHC Section 30952.2(b).
- 11. Assume such other responsibilities as may be assigned to it by the Agencies or as a result of subsequent legislative amendments.

E. Meetings

Regular meetings of the Committee shall be held monthly or as otherwise determined by the Committee. Special meetings of the Committee can be held for any purpose, by any method, including the use of conference telephone, electronic video screen communication or other electronic communications equipment, so long as all members participating in such meeting can concurrently communicate with the other members. Meetings may be called at any time by the Chairperson or any other of the Committee Members. Notice of all meetings shall be given at least two business days prior to the meeting. Notice shall include an agenda of items on which the Committee will take action. Any member of the Committee has the right to request that action on a particular item be deferred to allow for further review of the proposed item. Upon such a request, action on that item will be deferred for the time period requested by that member, up to a maximum of seven days. Each member of the Committee has the right to place a matter on the Committee's agenda for consideration.

F. Actions Without a Meeting

Any action required or permitted to be taken by the Committee may be taken without a meeting by way of written memorandum if all members of the Committee, individually or collectively, consent in writing to that action. The written consent or consents shall be filed with the minutes of the Committee. Action by written consent shall have the same force and effect as a vote of the Committee Members taken during a meeting.

G. Records, Minutes of Meetings, and Inspection Rights

The Committee shall keep all records, documents and minutes of meetings at the principal executive offices of the Department. In the event a request for records or documents generated for or by the Committee is received by a member of the Committee, the member shall, within 24 hours, notify all other Committee members of the request.

H. Project Management Team

The Committee hereby establishes a Project Management Team (PMT) that shall assist the Committee in the performance of its duties. The PMT shall consist of one staff member selected by each member of the Committee. The members of the PMT shall review matters that are to be brought before the Committee.

At the request of the Committee, the PMT may perform the following:

- Prepare agendas for the Committee's meetings.
- Assist the Committee in the performance of its duties by providing regular reports to the Committee on Bridge Project status, scope and issues involving budgeting, expenditures, staffing and contractor services.
- Assist the Committee in the review of contract specifications and bid documents, and other documents.
- Assist the Committee in the review of project status and schedules and to anticipate, identify, evaluate, and report to the Committee concerning any project issues as they arise.
- Assist the Committee in the development of cost estimates, risk assessments, and cash flow requirements.
- Review proposed contract change orders for Committee consideration and approval.
- Review claims for Committee consideration and approval.
- Assist the Committee in reviewing staffing levels and structures.
- Prepare other project related reports for Committee review.
- Perform such other assignments as appropriate.
- In carrying out the above tasks, seek assistance whenever appropriate from consultants retained by any of the Agencies doing work related to the Bridge Projects.

The PMT shall keep Committee Members informed as to its work, and will promptly provide any information in its possession which may be requested by a Committee Member.

I. Advance Notice of Significant Issues

Each Committee Member will provide to the other Committee Members and to the PMT advance notice of significant change orders and claims and other potential action items which are likely to be brought before the Committee by the Agency with whom that Member is associated in order to provide the Committee Members an adequate opportunity for review and preparation.

III. GENERAL

A. Integration Clause

This Agreement constitutes the complete and entire understanding among the Committee Members.

B. Amendments

This Agreement may be amended in writing from time to time upon agreement of the Committee Members.

C. Counter Parts

This Agreement may be executed in counterparts, each one of which will be an original or the equivalent thereof.

D. Miscellaneous

This Agreement is intended solely as a guide to the obligations, intentions and policies of the Committee Members. It does not constitute an authorization for funding a project nor does it constitute a legally binding agreement amongst the Agencies.

IN WITNESS WHEREOF, the Committee Members hereto have agreed to this Agreement on the date opposite their respective names.

Will Kempton

Director, California Department of Transportation

Steve Heminger

Executive Director, Bay Area Toll Authority

Diane C'Eidan

Date: _//2//05

Diane C. Eidam

Executive Director, California Transportation Commission



Memorandum

TO: Toll Bridge Program Oversight Committee DATE: July 30, 2009

(TBPOC)

FR: Jason Weinstein, Senior Program Coordinator, BATA

RE: Agenda No. - 2a

Consent Calendar

Item- TBPOC July 15, 2009 Meeting Minutes

Recommendation:

APPROVAL

Cost:

N/A

Schedule Impacts:

N/A

Discussion:

The Program Management Team has reviewed and requests TBPOC approval of the July 15, 2009 Meeting Minutes.

Attachment(s):

TBPOC July 15, 2009 Meeting Minutes



TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

MEETING MINUTES

 $July 15, 2009, 10:00 \ AM-1:00 \ PM$ Mission Bay Office, Conference Room 1906, 325 Burma Road, Oakland

Attendees: TBPOC Members: Will Kempton, Steve Heminger, and Bimla Rhinehart

<u>PMT Members</u>: Tony Anziano, Andrew Fremier, and Stephen Maller <u>Participants</u>: Bill Casey, Mike Forner, Michele DiFrancia, Keith Hoffman, Beatriz Lacson, Peter Lee, Brian Maroney, Bart Ney, Dina Noel, Mo Pazooki, Gary Pursell, Jim Richards, Bijan Sartipi, Pete Siegenthaler, Jon Tapping, Ken

Terpstra, Deanna Vilchek, and Jason Weinstein

Part-Time Participants, ABF: Pat Flaherty, Doug Fuller, Bob Luffy (via phone);

and Mike Flowers

Part-Time Participants, TYL/MN: Alvaro Piedrahita, Bob Nichol, Marwan

Nader, Al Ely, and Scott Buckley

Convened: 10:29 AM

	Items	Action
1.	 CHAIR'S REPORT Will Kempton, the Chair, reported that the Governor's Office anticipates that the Legislature will vote on the State budget next week. He noted the exemplary respons from State employees amid increased workday and salary 	
	 At the Chair's request, a recent KPIX, Channel 5 News coverage of the Labor Day weekend Bay Bridge closure was shown. He pointed out that there is national attention on how we do public outreach and this is an opportunity to showcase our efforts. 	
	 The Chair formally announced that this will be his last TBPOC meeting. He indicated that he has enjoyed working on this project and thanked everyone for the support he has 	

		Items	Action
		received.	
2.	TBP	OC / ABF / TYLMN Discussion	
	•	The Chair welcomed the ABF and TY	
		Lin / Moffatt & Nichol (TYL/MN)	
		guests to the meeting.	
	•	Tony Anziano distributed the SAS	
		Fabrication Status, dated July 10,	
		2009 chart for information.	
		T	
	•	Tony Anziano enumerated the items	
		currently being addressed, namely:	
		the outstanding liability issue for	
		both joint ventures (JV's), schedule	
		delays (the first shipment now	
		arriving in September), and the East	
		End shop drawings. He reported	
		that a proposed resolution to the	
		liability issue has been forwarded to	
		the joint ventures.	
		o Alvaro Piedrahita (TYL/MN)	
		stated that they are willing to	
		continue working under the	
		current contractual arrangement	
		and will continue to cooperate	
		regardless of liability issues. TYL/MN has offered draft	
		language on liability to ABF for	
		their review and consideration.	
		DII CC (ADD) · l· · l·l ·	
		they found the TYL/MN	
		proposed language too broad to	
		sign; however, both parties have	
		agreed to continue cooperation.	
		 Mike Flowers (ABF) added that 	
		the Department needs to be	
		involved since ABF had to	
		indemnify the Department in the	
		original contract. A resolution	
		would require a three-party	
		agreement.	
		agreement.	
	•	The reason for the latest delay in the	
	-	first shipment was discussed: why	
		defects were discovered so late in the	
		activity from appropriate by face in the	

	Items	Action
	process.	Action
	Mike Flowers reported that	
	testing and investigations are	
	going on to get to the root of the	
	problem, with results expected in	
	two weeks. Inspection has been	
	increased from 25% to 100%.	
	ADE 1 1 1 1 1 11 11 11 11 11 11 11 11 11 1	
	o ABF acknowledged responsibility for current QC issues. ABF	
	indicated that the overall process	
	is working, that everything is	
	being done to pick up the pace.	
	ABF needs the shop drawings	
	approved to build the bridge.	
_	The Chair noted that discussions	ļ
•	with ABF and TYL/MN and offers of	
	TBPOC financial assistance these	
	past six months have not resulted in	
	any improvement in the areas of	
	concern.	
	With reference to the shop	
	drawing approval process, he	
	emphasized the need to remedy	
	the working relationship among	
	all players in this project, and	
	that a problem in any aspect of	
	the work is everybody's problem.He stated that the TBPOC is at a	
	o He stated that the TBPOC is at a loss as to what else it can do to	
	help the joint ventures improve	
	the situation and get this	
	operation moving to tackle schedule issues.	
	 He challenged the team to take reasonable risks to advance the 	
	work faster and better	
	The Chair expressed to ARE and	
•	The Chair expressed to ABF and	
	TYL/MN that they have an unhappy client.	
		 Staff to arrange a TBPOC
		Vancouver visit with Candraft
	talk separately with each of the	and China visit with ZPMC's
	JV's, meet with Candraft in	Mr. Guan late next month.
	Vancouver, and travel to China to	ivii. Guaii iate iiest iiiviitii.
	talk to Mr. Guan of ZPMC.	

	Items	Action
		Action
	➤ The TBPOC is stepping in to	
	break the impasse and	
	overcome issues. It is	
	considering any and all	
	options to recover the	
	schedule, as there is a need to	
	fix the problems quickly.	
3.	CONSENT CALENDAR	
	a. June 4, 2009 TBPOC Meeting	 The TBPOC APPROVED all
	Minutes	consent calendar items, as presented.
	b. Yerba Buena Island Detour Contract	•
	Change Orders (CCO's)	
	 Dina Noel noted a revision to CCO 	
	75, S1 from a not-to- exceed amount	
	of \$1,100,000 to the actual amount	
	of \$981,810. Revised copies of the	
	CCO were distributed.	
	1) CCO 75, S1 – for all outstanding	
	costs associated with backfilling	
	<u> </u>	
	Bent W7L and W7R footings	
	(deferred under the original	
	change order).	
	2) CCO 91, S2 - \$5,494,737.30 for	
	time-related overhead due to a	
	465 working-day time extension	
	to the contract, which establishes	
	a December 10, 2010 contract	
	completion date.	
	3) CCO 112, S4 – \$1,500,000	
	additional funds needed to	
	complete the steel procurement	
	for the East Tie-In.	
	4) CCO 116, S2 - \$300,000 in	
	additional funds for the	
	transportation of the skid bent	
	and beam from the fabrication	
	site to the project site.	
	5) CCO 204 - \$3, 500,000 for Labor	
	,	
	Day weekend bridge closure	
	support costs.	
4.	PROGRESS REPORTS	
	a. Draft June 2009 Monthly Progress	
	Report	

 Items Andy Fremier presented, for Andy Fremier presented for The TBPOC confirmed 	
 Andy Fremier presented, for The TBPOC confirmed 	
information, the final June 2009 Monthly Progress Report, which was approved by the PMT through APPROVAL of the June 2009 Monthly Progress Report through	ort
delegated TBPOC authority, and requested TBPOC confirmation of this approval.	
The Chair praised Peter Lee and staff for the spectacular photographs in the report.	
5. PROGRAM ISSUES	
a. QA/QC Update	
The Flowchart of Segment Green	
Tag Process was discussed, relative	
to the latest shipment delays. Vice	
Chair Steve Heminger inquired as to	
what point(s) on the flowchart did	
the last two incidents relating to the	
West End box girder and 1AA	
segment occur.	
 Pete Siegenthaler reported that it 	
was under the flowchart box	
titled "METS performs required	
% QA NDT" when the latest defects were discovered. He also	
indicated that through the green tag process, the QA team was	
able to bring to ZPMC's attention	
to issues with the QC system.	
 The TBPOC was assured that 	
adjustments in the QC/QA	
procedure are being made, as	
needed.	
 It was noted that additional 	
Team China/METS QA resources	
may be necessary.	
b. PMT Operations	
 In order to aid the process, the Chair Staff to arrange for the 	TBPOC
indicated that the TBPOC and PMT and PMT to meet on the	
should meet for 30 minutes on the and prior to the regular	•
day of, before the TBPOC meetings, meetings.	
to allow for broader ranging	
discussions.	

Items	Action
 Vice Chair Steve Heminger noted that there has been agreement on some issues (e.g., circulation of "raw" information, greater involvement of PMT support staff at all project meetings) but still some minor issues with others (e.g., claims resolution process, flow and timeliness of communications). It was suggested that discussions be continued to resolve open issues. It is anticipated that the new meeting format will result in improved and more efficient operations. 	
6. SAN FRANCISCO-OAKLAND BAY BRIDGE (SFOBB) UPDATES a. Yerba Buena Island Transition Structures (YBITS) No. 1 Update • Tony Anziano reported that the YBITS No. 1 contract is on track and moving very quickly. o There will be a tour this afternoon of the island work.	
 On YBI Detour, Brian Maroney suggested that the TBPOC might be interested in receiving a detailed presentation from the YBI Detour contractors prior to the Labor Day weekend closure. The Chair stated that there is no indication that the Governor's Office wants to be engaged with the BART labor negotiations. Should the bridge closure be threatened by a BART strike, the Governor does have Public Health and Safety power to avert one. 	 Schedule YBI Detour contractors for a presentation to the TBPOC at the September meeting. The Department to approach the Governor's Office about potential BART strike around Labor Day weekend, and confirm with the legal department about using Governor's executive power to postpone strike.
b. Oakland Touchdown (OTD) No. 1 Update	

	Items	Action
	<u> </u>	Action
	Tony Anziano reported that the project is proceeding years well	
	project is proceeding very well.	
	 The sample light poles showing 	
	two different fabrication methods	
	have been mounted for the	
	TBPOC to inspect and make a	
	decision.	
7 DUM	IBARTON/ANTIOCH BRIDGES	
a.	Update/Schedule/Environmental	
	Permits	
•	Mo Pazooki gave an update on the	
	status of the Dumbarton and	
	Antioch bridge seismic retrofit	
	projects. The Pielegical Opinions from	
	o The Biological Opinions from	
	pertinent agencies are expected	
	on August 1; the combined Plans,	
	Specifications and Estimates	
	(PS&E) delivery is set for August	
	3, the Project Approval	
	Environmental Document	
	(PAED) on August 15, and	
	advertisement on December 14.	
	 Brian Maroney reported that 	
	Antioch design has cleared the	
	Toll Bridge Seismic Safety Peer	
	Review Panel (TBSSPRP) and	
	Dumbarton had some items the	
	panel wanted removed (column	
	casings).	
	agencies still pose some risk to	
	schedule for these projects.	
	Vica Classe Ca	
•	Vice Chair Steve Heminger reported	
	that AB 1175, which provides for the	
	addition of seismic safety	
	improvement projects on the	
	Dumbarton and Antioch Bridges to	
	the TBSRP using contingency and	
	authority to raise tolls, came out of	
	the Senate Transportation and	
	Housing Committee yesterday.	
	 It is expected that the bill will 	
	move as anticipated.	
L	more as anticipateu.	

	Items	Action
	o An early spring 2010 toll increase	Action
	is planned.	
	is plainted.	
8	BENICIA-MARTINEZ BRIDGE	
	a. 1962 Benicia-Martinez Bridge	
	Modification Update	
	 Peter Lee reported that the 1962 	
	contract is anticipated to be	
	completed in August 2009, four	
	months ahead of schedule and	
	within budget.	
	 A press release and public event 	
	are being planned for the	
	opening of the southbound I-780	
	lane and pedestrian/bicycle	
	pathway on August 29, 2009.	
	The Chair pointed out that the Provision Marking Print and a second secon	
	Benicia-Martinez Bridge open road	
	tolling has gotten more positive	
	response than any of the other the Toll Bridge Seismic Retrofit Program	
	projects.	
	projects.	
9	OTHER BUSINESS	
	 Vice Chair Steve Heminger 	
	presented the Chair with a plaque in	
	recognition of his commendable	
	service to the Program.	
	-	
	 The Chair reiterated his thanks for 	
	the experience and support, and	
	expressed his regret that he will not	
	be around for the bridge completion	
	but that he is looking forward to	
	receiving an invitation to the	
	opening event.	
10	YERBA BUENA ISLAND TOUR	
10	Bill Casey conducted a tour of the	
	YBI Detour jobsite. The group	
	visited the West Tie-In (WTI),	
	viaduct, East Tie-In (WTI),	
	work areas. Particular attention was	
	paid to the ETI site where the	
L	P	1

(continued)

Items	Action
temporary skidding system, the ETI truss, and the strengthening and removal work for the YB4-truss were explained.	

Adjourned: 1:36 PM

MEETING MINUTES

 $\label{eq:July 15} July 15, 2009, 10:00~AM-1:00~PM \\$ Mission Bay Office, Conference Room 1906, 325 Burma Road, Oakland

APPROVED BY:		
STEVE HEMINGER, Executive Director Bay Area Toll Authority	Date	
RANDELL H. IWASAKI, Director California Department of Transportation	Date	
BIMLA G. RHINEHART, Executive Director California Transportation Commission	Date	



Memorandum

TO: Toll Bridge Program Oversight Committee DATE: July 30, 2009

(TBPOC)

FR: Dina Noel, Assistant Deputy Director, Toll Bridge Program, CTC

RE: Agenda No. - 2b1

Item- Consent Calendar

Yerba Buena Island Detour Contract Change Order

Recommendation:

APPROVAL

Cost:

CCO 184-S1: \$4,393,420.00

Schedule Impacts:

None

Discussion:

Contract Change Order 184-S1 (\$4,393,420) provides for compensation of all outstanding additional costs incurred by the contractor due to Department impacts to the steel fabrication (Stinger Welding Inc.) of the East Tie-In truss. During the fabrication of this truss, the contractor incurred considerable impacts due to Department delays associated with the approval of truss shop drawings and various Department changes to the design of the truss. Along with CCO 184-S0 (partial compensation approved at the June 2009 TBPOC meeting) the compensation for these impacts is \$7,393,420.

Attachment(s):

- 1. Draft CCO 184-S1
- 2. Draft CCO 184-S1 Memorandum
- 3. YBI Detour CCO Implementation Strategy Document

CONTRACT CHANGE ORDER

Change Requested by:

Engineer

	1117	O I O I I A I I O I	- UINDEIN		Shange Hequeeted by: Engineer
c co ,	184	Suppl. No. 1	Contract No. 04 - 0120R4	Road SF-80-12.6/13.2	FED. AID LOC.: ACBRIM-080-1(097)N
To:	CC N	YERS INC			

You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract. NOTE: This change order is not effective until approved by the Engineer.

Description of work to be done, estimate of quantities and prices to be paid. (Segregate between additional work at contract price, agreed price and force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. This last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer's Estimate.

Adjustment of Compensation at Lump Sum:

In accordance with Section 4-1.03 "Changes" of the contract Standard Specifications, provide compensation to the Contractor for all outstanding costs incurred by the Contractor's steel fabricator Stinger Welding Inc., during the fabrication of the steel truss of the East Tie-In (ETI) portion of the Temporary Bypass Structure (Bridge No. 34-0006 (TEMP)) due to a Department caused delays, changes and impacts to the steel fabrication.

For this work, the Contractor will be compensated a lump sum of \$4,393,420.00. This sum, in addition to the compensation paid under the original Change Order No. 184, constitutes full and final compensation, including all markups, for all direct. indirect and impact costs, both past and future, pertaining to all work performed by Stinger Welding Inc. on the ETI steel truss and no additional compensation shall be paid.

Total Cost of Adjustment of Compensation at Lump Sum\$4.393,420.00

This change order excludes any additional costs incurred by the Contractor's subcontractor Danny's Construction Company, Inc. (DCCI) during the erection of the steel truss that were incurred due to the expedited fabrication of the truss by Stinger Welding Inc. in their efforts to mitigate the Department caused delays to the steel fabrication. Any compensation associated with these additional steel erection costs shall be compensated under Change Order No. 214.

This change order includes compensation for all costs associated with the design changes incorporated under Change Order No. 140. Supplement No. 2 as they pertain to the fabrication of the ETI truss.

st: Increase 🗹 Decrease	\$4,393,420.00
eferred	
BILL CASEY	Date
n Manager MIKE FORNER	Date
n Manager MIKE FORNER	Date
2000000	MIKE FORNER

We the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as may otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment therefor the prices shown above.

NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specifications as to proceeding with the ordered work and filing a written protest within the time therein specified.

Contractor Acceptance by		
Signature	(Print name and title)	Date

CONTRACT CHANGE ORDER MEMORANDUM

TO: MIKE FORNER	/ DEANNA VILCHECK		FILE: E.A.	04 - 0120R4			
			CO-RTE-PM	SF-80-12.6/13.2			
FROM: BILL CASEY			FED. NO.	ACBRIM-080-1(097)N			
CCO#: 184 SUF	PPLEMENT#: 1 Cat	tegory Code: CHXX	CONTINGENCY BALANCE (incl. this change) \$27,112,801.59				
COST: \$4,393,42	20.00 INCREASE	E ✓ DECREASE □	HEADQUARTER	RS APPROVAL REQUIRE	ED? YES NO		
SUPPLEMENTAL FUN	DS PROVIDED:	\$0.00	IS THIS REQUEST IN ACCORDANCE WITH ✓ YES ☐ NO ENVIRONMENTAL DOCUMENTS?				
CCO DESCRIPTION: ETI Truss Fabrication I	mpacts		PROJECT DESC CONSTRUCT RO	CRIPTION: OUTE 80 TEMP BYPASS	STRUCTURE		
Original Contract Time: Time Adj. This Change: Previously Approved Contract Time Adjustments:		Previously Approved C Time Adjustments:		ntage Time Adjusted: ing this change)	Total # of Unreconciled Deferred Time CCO(s): (including this change)		
475 Day(s	DEF Day	y(s) 1195 Da	ay(s)	252 %	8		

DATE: 7/21/2009

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THIS CHANGE ORDER PROVIDES FOR:

Final compensation to the Contractor for additional costs incurred due to Department-caused delays and impacts to the steel fabrication of the East Tie-In truss.

This project, the Yerba Buena Island Detour (YBID), calls for the construction of a temporary detour for both eastbound and westbound I-80 traffic that will allow for the tie in of the new east span of the San Francisco Oakland Bay Bridge to Yerba Buena Island. The YBID encompasses three main structures, the East Tie-In to the existing bridge, the West Tie-In (WTI) to Yerba Buena Island, and the Viaduct structure between the two tie ins. The contract was awarded as a performance-based project with the Contractor responsible for meeting the design criteria specified in the contract.

A December 14, 2006 Department strategy memorandum, approved by Tony Anziano, Toll Bridge Program Manager, Richard Land, Chief Engineer, and subsequently by the Toll Bridge Program Oversight Committee recommended that the Department assume the design responsibility for the East Tie-In portion of the detour. Based on this memorandum, the design of the structure was changed from a design that incorporated the existing steel truss bridge into the new structure to a design that replaces the existing structure with a new structure (roll out / roll in).

Contract Change Order No. 140 was issued in the amount of \$10,920,525.00 to provide for the fabrication of the steel truss of the ETI portion of the structure (the roll in structure). The change order was priced with an aggressive fabrication schedule that was required in order to meet the Department's planned roll in of the ETI truss during Labor Day Weekend of 2009. That change order provided an incentive payment for the Contractor to improve upon an agreed upon March 8, 2009 steel delivery date with a matching disincentive for a late delivery.

During the fabrication of this truss, the Contractor incurred considerable impacts due to Department delays associated with the approval of the truss shop drawings and various Department changes to the design of the truss. The design changes to the truss were incorporated under Contract Change Order No. 140 - Supplement No. 2 with compensation deferred for any additional costs resulting from these changes. Based on these delays and changes, the Contractor submitted a request, dated April 2, 2009, for approximately \$8,022,000.00 in compensation. A subsequent request, dated May 15, 2009, has now been submitted for \$8,968,628.00.

The original Contract Change Order No. 184 provided partial compensation of \$3,000,000.00 based on costs that had been documented at the time that change order was issued. The Contractor has now submitted documentation that supports additional compensation of \$4,393,420.00 to resolve all costs associated with the steel fabrication of the truss. This contract change order provides for this compensation.

This contract change order recognizes significant Department delays that were incurred by the fabricator in the shop drawing approval process. These delays were incurred over the period from June 2008 through February 2009. Contract Change Order No. 140 did not address any time allowance for the shop drawing review process. However, the Contractor was verbally notified that a 10-day review should be anticipated. Based on this notification, the Contractor anticipated approval of the shop drawing for the north truss, south truss, and beams and stringers over the period from August 14, 2008 to September 11, 2008. The final approval of the drawings was actually received between December 30, 2008 and February 18, 2009. This represents a 4-½ to 5-½ month delay.

CONTRACT CHANGE ORDER MEMORANDUM

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The shop drawing approval delay had 3 significant impacts to the Contractor's operations. These impacts are described below:

1) Unabsorbed Shop and Labor Resources (August through November 2008):

By the summer of 2008, the Contractor had dedicated approximately half of their fabrication shop to the ETI truss and had increased their labor force in anticipation of starting the work. The 4-1/2 to 5-1/2 month delay to the work resulted in the Contractor having to absorb over 50,000 man-hours that were planned to be employed on the truss into other projects. In an effort to mitigate these man-hours without further delaying the ETI work, the Contractor set up a temporary fabrication yard in a vacant lot adjacent to their permanent shop facilities and employed their work force on other projects. Considerable costs were incurred in setting up the temporary fabrication yard and considerable labor inefficiencies were incurred on these projects.

2) Impacts to the ETI Truss Fabrication (October 2008 through April 2009):

During the fall of 2008 the Contractor began fabrication of the truss in a piecemeal fashion due to the delays in the shop drawing approval. While this work was highly inefficient, the Contractor performed this work in an effort to mitigate Department delays and the risk of not meeting the planned 2009 Labor Day Weekend roll in of the truss. Once shop drawings were approved by the winter of 2008/2009, the Contractor dedicated all of their available resources to the truss. This culminated in over 6,000 man-hours per week being employed on the truss fabrication by late February of 2009 compared to the as-planned peak man-hours of 3,000 per week. Over 23,400 hours of overtime was also expended on this work.

3) Impacts to Concurrent Projects (December 2008 through July 2009):

The Contractor's as-planned schedule anticipated that by December of 2009 the resources required for the fabrication of the ETI truss would have peaked and man power could begin to be redirected to other planned fabrication projects. Due to the delays to the work, just the opposite occurred. Between December 2008 and April of 2009, the Contractor employed approximately 38,000 unplanned man-hours on the ETI truss. This resulted in considerable delays to these other projects. In addition, the ETI truss occupied the majority of the fabrication shop at a time when it was anticipated the work would have been completed. This resulted in additional fabrication work being performed on other projects in the temporary fabrication facility set up adjacent to the permanent facility.

Both the piecemeal work performed in the fall of 2008 and the increased resources employed during the winter and spring of 2009 resulted in extensive inefficiencies being incurred to the actual ETI truss fabrication. An as-planned verses actual cost analysis shows an additional 26,200 man-hours were expended on the truss fabrication. Additional costs were incurred in working extended overtime, labor escalation and employee retention along with additional costs related to design changes incorporated into the truss under Contract Change Order No. 140 - Supplement No. 2. A total cost of \$3,365,040.00 has been determined to be compensable for these impacts.

Concerning impacts to other projects, the Contractor acted to mitigate Department delay costs by absorbing over 50,000 asplanned man-hours into other projects during the summer and fall of 2008. Additionally, the Contractor incurred significant impacts to their as-planned operations on other projects during the winter and spring of 2009 due to the approximately 38,000 unplanned man-hours employed on the ETI truss. These impacts include performing fabrication work in the vacant lot adjacent to their actual fabrication facilities. Costs associated with this work include labor inefficiencies, costs associated with the set up and rental equipment required to support the temporary fabrication facility and overtime the Contractor incurred during the winter and spring of 2009 in an effort to maintain their delivery schedules on these other projects. The Contractor has produced detailed labor reports and as-planned bid documentation to support these additional costs. A total cost of \$3,384,480,00 has been determined to be compensable for these impacts.

The Contractor has also documented financing costs associated with significant costs overruns and revenue shortfalls resulting from these Department impacts to their operations. Compensation of \$643,900.00 shall be paid for these costs.

The total compensation of \$7,393,420,00 shall be off set by the \$3,000,000,00 compensated under the original Contract Change Order No. 184. Compensation shall be paid as an adjustment of compensation at an agreed lump sum of \$4,393,420.00, which shall be financed from the contract's contingency funds. A detailed cost estimate is on file.

CONTRACT CHANGE ORDER MEMORANDUM

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Adjustment of contract time is deferred pending completion of the work specified in this change as it may become the controlling operation in accordance with Section 8-1.07 "Liquidated Damages", of the Standard Specifications and Section 10-1.20 "Time Related Overhead (TRO)" of the Special Provisions.

Compensation for delays resulting from this work will be made in accordance with Section 8-1.09 "Right of Way Delays" of the Standard Specifications and Section 10-1.20 "Time Related Overhead" of the Special Provisions.

This change was concurred with by Alec Melkonians - Asst. Project Manager and Hong Wong - Project Engineer.

Maintenance concurrence is not required as this is an administrative change and doesn't affect any permanent roadway features.

CONCURRED BY:				ESTIMATE OF COST				
Construction Engineer:	Bill Casey, Resident Engineer	Date		THIS REQUEST	TOTAL TO DATE			
Bridge Engineer:		Date	ITEMS	\$0.00	\$0.00			
Project Engineer:	Hong Wong, PE	Date	FORCE ACCOUNT AGREED PRICE	\$0.00 \$0.00	\$0.00 \$0.00			
Project Manager:	Alec Melkonians	Date	ADJUSTMENT	\$4,393,420.00	\$7,393,420.00			
FHWA Rep.:		Date	TOTAL	\$4,393,420.00	\$7,393,420.00			
Environmental:		Date	FEDERAL PARTICIPATION					
Other (specify):		Date	PARTICIPATING NON-PARTICIPATI	PARTICIPATING IN PART	✓ NONE ON-PARTICIPATING			
Other (specify):		Date	FEDERAL SEGREGATION	- leased				
District Prior Approval B	y:	Date	process	CCO FUNDED PER CONTRACT CCO FUNDED AS FOLLOWS				
HQ (Issue Approve) By:	Bob Molera, HQ CCO Engineer	Date	FEDERAL FUNDING SOURCE PERCENT					
Resident Engineer's Signature:		Date						

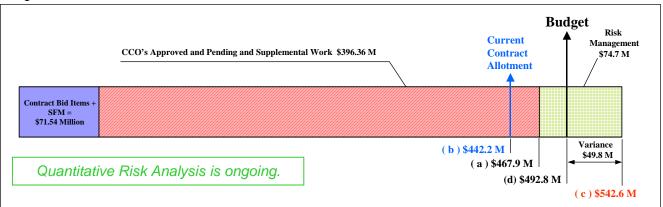


Yerba Buena Island Detour (Contract 04-0120R4)									
Contract Award:	March 10 th , 2004	Suspension Days:	302 Working Days						
Original Working Days:	475 Working Days	Contract Extensions:	1660 Working Days						
Original Contract Completion:	July 27th, 2005	Projected Contract Completion:	December 10, 2010						

Introduction

Two memos were developed to outline a strategy for a revised YBID project that enhanced YBID viaduct design, developed tie-in design (east and west) in-house, improved the retrofit of the YBI viaduct (replacing the top deck of the viaduct rather than retrofitting in place) and advanced and incorporated select YBITS foundation work. The two memos are "San Francisco-Oakland Bay Bridge Corridor Schedule Mitigation – Strategy for South-South Detour Contract Completion" issued December 14, 2006, and "Recommendation to Construct Select Yerba Buena Island Transition Structure Foundations by Contract Change Order" issued on December 25, 2006. This strategy will result in substantial increases in the cost of the YBID project.

As approved at the June 2009 TBPOC meeting the revised budget for the YBID project is 492.8M. This figure was established in May 2009 using all available information to date. This figure is within the projects approved budget balance beam, as shown below:



Scope of Work for YBID

The revisions to the original scope of work currently associated with the Yerba Buena Island Detour Project have been assigned into the following categories with their associated estimated cost:

Category	Scope of Work	Current Budget	In Progress Status Update from June 09 Approved Budget			
		(June 2009)	Current	Delta		
(0)	Original Bid Items, Baseline CCOs (1 through 48), and State Furnished Materials	\$83.7	\$83.7	\$0		
(1)	YBID New Viaduct	\$40.1	\$40.5	\$0.4		
(2a)	West Tie-In Existing Viaduct Phase 1	\$40.1	\$40.1	\$0.0		
(2b)	West Tie-In Phase 2	\$21.8	\$18.1	(\$3.7)		
(3)	East Tie-In	\$140.0	\$138.4	(\$1.6)		
(4)	YBI Transition Structures Advance Foundations	\$104.3	\$103.2	(\$1.1)		
(5)	Administrative Issues and General CCOs	\$37.8	\$37.5	(\$0.3)		
Subtotal		\$467.8	\$461.5	(\$6.3)		
Contingend	Contingency		\$31.3			
Approved E	Budget	\$492.8				

Contract payments as of July 15, 2009: \$365.2M.

As shown, the current status of CCOs required to modify the original scope of the YBID work as defined in Categories 1 through 5 is \$377.8M. The status of each category of work is discussed in the succeeding pages of this report.



Bid Items, Baseline CCOs, & State Furnished Material



The break down of Category (0) is as follows:

Original Contract Amount \$ 71.2 million
Baseline CCOs (1 through 48) \$ 12.1 million
State Furnished Materials \$ 0.4 million
Total \$ 83.7 million

Baseline Contract Change Orders (1 through 48)

CCO#	Description	Executed Date	Cost	ccc) #	Description	Executed Date	Cost
1	Flagging and Traffic Control	5/13/2004	\$100,000.00	248	31	Read Inclinometer/Adjust Equipment Costs	10/18/2005	\$29,782.99
1S1	Additional Funds for Flagging and Traffic Control	2/9/2007	\$200,000.00	248	24S2 Temporary Suspension Partially Extended		5/2/2006	\$4,812,631.58
2	Bidder Compensation	5/8/2004	\$1,575,000.00	248	3	Contract Days Extension/TRO Compensation	Voided	N/A
3	Partnering	9/7/2004	\$25,000.00	25	i	Bent 48, 49R, 52R Outside Boundary	3/24/2005	(\$19,000.00)
4	DRB	9/7/2004	\$100,000.00	26	5	Bent 48 Articulation	4/22/2005	\$0.00
5	Federal Trainee Program	11/12/2004	\$20,000.00	27	•	Bent 52L Footing Conflict	1/19/2006	\$94,386.51
5S1	Non-Journey Person Training	3/10/2005	\$50,000.00	28	3	Hydroseed Around W2 Columns	3/24/2005	\$20,000.00
6	Removal of DBE/SBE Monitoring	2/10/2005	\$0.00	29)	Replacement of Surveillance Camera	3/24/2005	\$3,542.00
7	Sampling and Analysis Work	8/30/2004	\$30,000.00	30)	Additional Elastic Response Analysis	5/31/2005	\$10,700.00
8	SWPPP Maintenance Sharing	8/30/2004	\$75,000.00	31		Soil Analysis Outside Plan Limits	6/27/2005	\$20,000.00
9	Additional Photo Survey/Public Relations	9/14/2004	\$50,000.00	32	!	SFPUC Permit Specification Change	5/17/2005	\$0.00
10	Temporary Shuttle Van Service	7/16/2004	\$650,000.00	33	3	Design Enhancements	Voided	N/A
10S1	Additional Funds for Temporary Shuttle Van Service	6/23/2005	\$100,000.00	34		Pole Structure Welding Specification Revision	9/30/2005	\$0.00
10S2	Additional Funds for Temporary Shuttle Van Service	1/12/2007	\$500,000.00	35	,	Revision of East Tie-In Design Criteria	Voided	N/A
11	Utility Potholing	9/14/2004	\$100,000.00	36	*	Extend Limits of Viaduct Demolition	Voided	N/A
12	Just-In-Time Training (RSC Pavement)	2/10/2005	\$5,000.00	37	•	4 Hr Emergency Travel Way	Voided	N/A
13	PMIV Document Management System	11/3/2004	\$486,743.50	375	31	Emergency Travel Way Falsework	Voided	N/A
14	Temporary Suspension	5/19/2004	\$0.00	38	3	Revision of West Tie-In Design Criteria	8/4/2005	\$0.00
15	Archaeology Investigation	7/19/2004	\$30,000.00	39)	Provide Shuttle Service to USCG	6/27/2005	\$10,000.00
15S1	Additional Funds for Archaeology Investigation	4/22/2005	\$15,000.00	40)	Sewer Pipe Material Change	9/26/2005	\$1,561.95
16	Roadway Profile at WTI	Voided	N/A	41		Bent 49L Utility Relocation	Voided	N/A
17	Modify Drainage at G4 Entry Vault	10/24/2006	\$108,217.45	42	2	Bent 48R Pile Load Test	9/12/2005	\$20,000.00
18	Access Control Measures	9/8/2004	\$50,000.00	428	31	Bent 52R Pile Load Test	12/15/2005	\$5,000.00
19	EDR1 Alignment Modification	5/12/2005	\$0.00	43	3	Material On Hand Specification Change	9/16/2005	\$75,953.88
20	A490 Bolts	10/23/2006	\$0.00	438	31	Addition of YBITS Advance to Material On Hand	Voided	N/A
21	Removal /Disposal of Stairway	4/13/2005	\$14,060.00	44		Electrical Call Box Relocation		\$47,480
22	Clean Stairs and Walkways	5/24/2005	\$35,000.00	45	;	Additional SWPPP	2/21/2006	\$250,000.00
22S1	Additional Funds for Cleaning Stairs and Walkways	11/24/08	\$25,000.00	46	5	Southgate Road Reopening	3/8/2006	\$50,000.00
23	Shared Field Data System (ShareArchive)	Voided	N/A	47	,	Hazardous/Non-Hazardous Soil Removal	12/15/2005	\$100,000.00
24	East and West Tie-In Temporary Suspension	2/1/2005	\$2,181,467.40	48	·	Buried Man-Made Objects	12/15/2005	\$50,000.00
Total for	r Baseline Contract Change O	rders						\$12,107,527

The scope of work for CCO No. 36 was completed and compensated for under the larger scope of CCO No. 76.



SSD New Viaduct



Progress of Work

Construction of foundations, columns, and bent caps is complete. Fabrication of the structural steel truss, performed by Dongkuk S&C in South Korea, is complete with all steel having arrived in the U.S. All Viaduct steel has been erected into place. All decks are complete. Barrier rail construction is in progress.

Status of Contract Change Orders: YBID New Viaduct:

ССО	Method of Payment	Description	HQ Status	TBPOC Status	CCO Status	Current Estimate/ Actual Cost	Change from June 09 Approved Budget
49	LS	Stringer and Floor Beam Design Study	N/A	N/A	Executed 5/2/2006	\$109,183	
49S1	FA	Truss Design Modifications (Changes to Stringer and Floor Beam Connections)	I&A 12/08/06	N/A	Executed 8/17/2006	\$150,000	
49S2	FA	,	I&A 12/08/06	N/A	Executed 12/18/2006	\$100,000	
Subtotal	(CCO #49 ar	nd Supplements)				\$359,182	
50	FA		N/A	N/A	Executed 5/8/2006	\$325,000	
50S1	FA	Stand Alone Viaduct Design	I&A 9/21/06	N/A	Executed 10/16/2006	\$300,000	
50S2	FA	ciano nacional de la ciana de	I&A 12/08/06	N/A	Executed 12/18/2006	\$100,000	
50S3	FA		I&A 2/09/07	N/A	Executed 2/13/07	\$175,000	
Subtotal	(CCO #50 ar	nd Supplements)				\$900,000	
54	LS	Deck Drainage	N/A	N/A	Executed 5/2/07	\$8,000	
55	LS	Viaduct Fabricator Change (SGT Closeout)	I&A 7/08/07	Approved 6/27/07	Executed 8/7/07	\$5,665,330	
55S1	LS	SGT Fabrication Closeout - Dongkuk Materials	I&A 1/24/08	Approved 3/5/08	Executed 3/17/08	\$980,600	
59	LS	Water Blast Rebar Cages	N/A	N/A	Executed 2/22/07	\$5,000	
59S1	LS	Additional funds, Water Blast Rebar Cages	N/A	N/A	Executed 11/24/08	\$5,000	
60	LS	Construction of Bent Caps	I&A 6/13/07	Approved 6/27/07	Executed 6/18/07	\$7,435,950	
67	FA	Viaduct/ETI Interface Modifications (Design Cost)	I&A 5/14/07	N/A	Executed 9/27/07	\$800,000	
79	LS	Fabrication Cost for Viaduct Design Changes July '05 - October '06	I&A 7/19/07	N/A	Executed 8/7/07	\$803,400	
79S1	LS	Fabrication Cost for Viaduct Design Changes - July 05-Oct 06	I&A 6/13/08	N/A	Executed 8/4/08	\$75,860	
80	LS	Erection Costs for Viaduct Design Changes through October 2006	N/A	Approved 1/31/08	Executed 2/20/08	\$6,912,200	
82	FA	OGAC Paving and Expansion Dams		N/A	In progress	\$327,680	¢191 296
213		Bent 48 Expansion Joint & Drainage Escalation		TBD	In Progress	\$488,100	\$181,386
85	LS	Design of 300mm Waterline Relocation	N/A	N/A	Executed 3/17/08	\$12,480	
87	LS	Viaduct Shipping Escalation Costs	I&A 7/24/07	N/A	Executed 10/2/07	\$534,570	
87S1	LS	Viaduct Shipping Escalation Costs	I&A 1/14/08	N/A	Executed 1/30/08	\$200,000	
88	LS	Viaduct Fabrication Delays	I&A 7/19/07	N/A	Executed 8/7/07	\$954,460	
88S1	LS	Viaduct Fabrication Delays	I&A 8/22/07	N/A	Executed 9/27/07	\$776,630	
98	FA/LS	Viaduct Steel Storage and Handling Cost	I&A 5/30/08	N/A	Executed 6/18/08	\$845,370	



99	LS	Viaduct Erection Costs (Post Oct. 2006)	I&A 4/17/08	N/A	Executed 5/22/08	\$862,614	
99S1	LS	Additional Viaduct Erection Costs		N/A	In progress	\$125,000	
100	FA	Viaduct Fabrication Costs (Post Oct. 2006)	I&A 1/22/08	N/A	Executed 1/28/08	\$650,000	
105	FA/LS	Dongkuk Fabrication and Temp Bracing Fabrication Costs (July 2007 Plans)	I&A 4/2/08	Approved 4/3/08	Executed 4/17/08	\$2,140,640	
106		CCO Voidedprevious scope of work was incorporated into CCO 105				-	-
107	LS	Furnish and Drive Erection Tower Falsework Piles	I&A 8/07/08	N/A	Executed 10/02/08	\$855,190	
111	FA/LS	USCG Parking Replacement and Protection	N/A	N/A	Executed 3/17/08	\$163,223	
111S1	LS	Additional costs USCG Parking Lot	N/A	N/A	Executed 6/30/08	\$8,940	
115	FA	Third VIA Shipping for CCO #67 July 07 plans	I&A 5/06/08	N/A	Executed 5/22/08	\$850,000	
128		60% of Waterline Relocation and Viaduct Connection Modifications		N/A	In progress	\$863,590	
133	-	Lightweight Conc. Mix Design Spec Change	N/A	N/A	Executed 9/12/08	\$0	
134	LS	60% of Project Wide Electrical Changes		TBD	In Progress	\$1,380,554	
196		Revised Electrical Lighting		TBD	In Progress	\$210,000	
135	LS	Rebar Deck Escalation Costs	I&A 11/09/08	N/A	Executed 1/28/09	\$995,100	
136	FA/LS	Provide additional alternate entrance access to USCG Base	N/A	N/A	Executed 9/23/08	\$74,540	
138	LS	Waterline Relocation for Fire Hydrant (Conflicts with Span 49 Falsework)	N/A	N/A	Executed 9/23/08	\$278,200	
148	FA	USCG Road Canopy below Viaduct	I&A 8/27/08	N/A	Executed 9/23/08	\$500,000	
152	LS	Relocate USCG Road for steel erection FW Towers at Span 51	I&A 1/06/09	N/A	Executed 2/4/09	\$336,420	
156	LS	Span 49 F/W Conflict w/ USCG Utilities	N/A	N/A	Executed 9/23/08	\$180,820	
163	LS	Viaduct Grade Conflict	N/A	N/A	Executed 6/12/09	\$83,202	(\$16,798)
173		Deck Casting and Expansion Joint Escalation		TBD	In Progress	\$1,000,000	
178		Type 7 Fence at Barrier		N/A	In Progress	\$457,356	\$374,176
198		Job Wide Stripping Plan (Viaduct Portion)		TBD	In Progress	\$90,000	
199		Install Overhead Sign		TBD	In Progress	\$100,000	
201		Viaduct Steel Erection USCG Protective Netting		N/A	In Progress	\$156,350	(\$73,650)
209		Viaduct USCG Flagging & Delays (Span 51)		N/A	In Progress	\$92,810	(\$47,190)
Current	Forecast fo	YBID New Viaduct				\$40,544,362	\$417,924

Budget Status

The Viaduct portion of the YBID was bid at \$26.74M. The projected additional costs in the December 14, 2006 Strategy Memorandum were estimated to be \$9M. The June 2009 revised additional cost estimate is \$40.1M with a current projection of \$40.5M. CCOs executed to date are \$35.3M.

West Tie-In

Phase 1



Progress of Work

Phase 1 work was substantially complete with the move in of the Structure on September 03, 2007. Miscellaneous electrical and drainage work remain. WB On-ramp was reopened on August 8, 2008.



Status of Contract Change Orders: West Tie-In Existing Viaduct (Phase 1)

ссо	/lethod o Payment	Description	HQ Status	TBPOC Status	CCO Status	Current Estimate/ Actual Cost	Change from June 09 \pproved Budget
58	FA	Bridge Removal Plan	N/A	N/A	Executed 11/21/06	\$60,000	
58 S1	FA	Bridge Removal Plan	N/A	N/A	Executed 7/05/07	\$40,000	
61	FA	Advance Engineering (Work Plans and Submittals), Site Prep (Ramp Closures, Access Road), Civil Work (Grading), Structure Work (Material Procurement)	I&A 1/09/07	N/A	Executed 2/27/07	\$400,000	
61S1	LS/FA	Construction of Stage 1 Area and Substructure	I&A 5/16/07	Approved 6/27/07	Executed 5/18/07	\$9,995,644	
66	FA	TMP – Video Equipment (WTI Phase 1)	N/A	N/A	Executed 7/20/07	\$175,000	
68	FA	Temporary Electrical Work	N/A	N/A	Executed 7/20/07	\$140,000	
68S1	FA	Temporary Electrical Work Stage 2, 3 &4	I&A 12/02/07	N/A	Executed 10/31/07	\$510,000	
72	LS	Structure Work (Superstructure), and Temporary Shuttle Service	I&A 7/19/07	Approved 7/27/07	Executed 7/20/07	\$11,096,900	
76	LS	Labor Day Bridge Demolition and Move-In	I&A 7/19/07	Approved 7/27/07	Executed 7/20/07	\$2,240,300	
76S1	LS	Labor Day Bridge Move-In (Changeable Message Signs, Temporary Signs, Traffic Control, Bridge Removal, Bridge Move-In, Paving and Roadway Repairs, CCM Support Costs, City Traffic Officers)	I&A 8/28/07	Approved 8/24/07	Executed 9/27/07	\$10,144,140	
84	LS	Skid Track Foundations and Temporary Columns	I&A 7/27/07	Approved 7/27/07	Executed 7/31/07	\$3,980,000	
101	LS	Reconstruct Slab, West Bound On-ramp	I&A 4/02/08	N/A	Executed 4/17/08	\$846,140	
101S1	LS	WB Onramp Supplemental Work	I&A 1/06/09	N/A	Executed 2/4/09	\$149,560	
102	FA	North side Drainage Work	N/A	N/A	Executed 4/4/08	\$60,000	
102S1	LS	Northside Drainage Work	N/A	N/A	Executed 7/15/09	\$48,818	\$46,578
102S2	FA	Additional Northside Drainage Work	N/A	N/A	Executed 7/15/09	\$50,000	
103	LS	Labor Day Weekend Closure Misc. Costs	N/A	N/A	Executed 2/20/08	\$173,140	
urrent S	Status for We	est Tie-In (Phase 1)				\$40,109,642	\$46,578

Budget Status

The projected additional costs in the December 14, 2006 Strategy Memorandum were estimated to be \$40M. The June 2009 revised additional cost estimate is \$40.1M with a current projection of \$40.1M. CCOs executed to date are \$40.1M.

West Tie-In Phase 2 2b

Progress of Work

Construction/Design coordination meetings with the Contractor are ongoing as needed. Foundation work and columns are complete. Superstructure for Frames 1 and 2 have been cast. Load transfer at Frame 1 is complete with monitoring in progress. Frame 3 superstructure is completed. Removal of YBI columns at Bents 40, 41A, 41B, and 42 is in progress.



Status of Contract Change Orders: West Tie-In (Phase 2)

ссо	Method of Payment	Description	HQ Status	TBPOC Status	CCO Status	Current Estimate/ Actual Cost	Change from June 09 Approved Budget
62	LS	Construction of Phase 2 Foundations and Credits for Elimination of Bid Items 12 and 90	I&A 2/29/08	Approved 4/4/08	Executed 4/7/08	(\$4,649,850)	
200		Shoring at Abutment 47A		TBD	In Progress	\$300,000	
71	LS	WTI Phase 2 Pile at Bent 46L/Slab Bridge Removal	I&A 7/24/07	N/A	Executed 7/20/07	\$384,130	
108	LS	Substructure	I&A 6/20/08	Approved 6/18/08	Executed 6/25/08	\$5,378,800	
117	FA	Surface Drainage (Southside)	N/A	N/A	Executed 1/6/09	\$150,000	
128		20% of Waterline Relocation and Stringer Stiffeners		N/A	In progress	\$154,530	
134	LS	20% of Project Wide Electrical Changes		TBD	In Progress	\$460,185	
196		Revised Electrical Lighting		TBD	In Progress	\$70,000	
141	LS/FA	Superstructure Construction	I&A 11/13/08	Approved 11/18/08	Executed 11/25/08	\$13,200,000	
141S1	ACUP	Superstructure Construction Completion Incentive (Release of Frame 1 Bent Cap FW)		Approved 5/15/09	Executed 5/15/09	\$1,500,000	
143		Civil Work (EB Onramp and Mainline)		TBD	In Progress	\$156,436	(\$3,680,814)
161	LS	T7-Line Detour	I&A 11/10/08	N/A	Executed 11/25/08	\$403,965	
168		Superstructure Design Modifications		TBD	In Progress	\$500,000	
198		Job Wide Stripping Plan (WTI Phase 2 Portion)		TBD	In Progress	\$70,105	
							(\$3,680,814)

Budget Status

The Contractor's bid price for the West Tie-In was \$9.0M. Based on the Department's December 14, 2006 Strategy Memorandum, the costs associated with the Phase 2 West Tie-In work were estimated to be an additional \$13.0M. The June 2009 revised additional cost estimate is \$21.8M, with a current projection of \$18.1M. CCOs executed to date are \$16.4M.

East Tie-In



Progress of Work

Bent 52A and skid bent foundation design packages were delivered October 2007. ETI design plans for the skid bents and skid beams were delivered March 15, 2008 and truss plans were delivered April 7, 2008. Construction/Design Coordination meetings with the Contractor are ongoing.

Fabrication of the skid bent and skid beams took place at Thompson Metal Fab, Inc. in Vancouver, WA and the fabrication of the truss took place at Stinger Welding Inc. in Coolidge, AZ. All steel has arrived at the job site.

The existing SFPUC sanitary sewer pump station has been relocated with the new pump station up and running. Construction of the skid bent foundations is complete. Erection of the Skid Bent towers and beams is completed. Erection of the truss is complete, with the deck in progress.

Status of Contract Change Orders: East Tie-In

ССО	Method of Payment	Description	HQ Status	TBPOC Status	CCO Status	Current Estimate/ Actual Cost	Change from June 09 Approved Budget
63	FA	Advance Engineering (Work Plans and Submittals)	I&A 8/22/07	N/A	Executed 9/27/07	\$800,000	
69	LS	Procurement of Pump/Control Panel for Pump Station Relocation	N/A	N/A	Executed 10/10/07	\$111,280	
69S1		Construction for Pump and Control Panel for Relocated Pump Station	I&A 12/19/07	N/A	Executed 3/17/08	\$499,996	
69S2	LS	Sewer Pump Electrical Changes	I&A 2/25/09	N/A	Executed 4/08/09	\$8,953	



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92	FA	ETI AT&T Fiber Optic Relocation	N/A	N/A	Executed 12/17/07	\$175,000	
93	LS/FA	Lead Paint Mitigation Existing Truss (Span YB-4)	I&A 2/13/08	N/A	Executed 2/20/08	\$563,725	(\$3)
93S1	LS	Additional Lead Abatement at Span YB-4	I&A 6/8/09	N/A	Executed 6/17/09	\$347,417	(40)
104	LS	Pier E-1 Access Towers	N/A	N/A	Executed 1/30/08	\$150,000	
113	LS	Relocate Waterline in Conflict with Northern Skid Bent Footings	N/A	N/A	Executed 3/17/08	\$167,990	
128		20% of Waterline Relocation and ETI Exterior Stringer Stiffeners		TBD	In progress	\$354,530	
137	LS	Pump station Water Tank Demo	N/A	N/A	Executed 6/26/08	\$114,490	
90	LS	Bent 52A and Skid Bent Footings and Credits for Eliminated Bid Items 10 and 42	I&A 3/26/08	Approved 4/4/08	Executed 4/14/08	\$11,308,380	
97	FA	Bent 52A and Skid Bent Footing's Material Procurement	I&A 11/06/07	N/A	Executed 11/19/07	\$850,000	
121	LS	Construct Stage 1 Soil Nail Wall, Upper East Tie-In area	N/A	N/A	Executed 3/17/08	\$142,670	
121S1	LS	Construct Stage 2 Soil Nail Wall, Upper East Tie-In area	N/A	N/A	Executed 3/18/09	\$518,130	
162	LS	Bent A3 Shoring	I&A 3/30/09	N/A	Executed 4/01/09	\$268,235	
180	LS	Skid Bent Footing Backfill at A4-A6 and B4-B6	I&A 5/20/09	N/A	Executed 6/12/09	\$237,000	
		Backfill at Stage 1 and 2 Wall Upper ETI Area		TBD	In Progress	\$1,751,404	
127	FA	RTU – 8 Service Platform	N/A	N/A	Executed 9/03/08	\$75,000	
134	LS	20% of Project Wide Electrical Changes		N/A	In Progress	\$460,185	
196		Revised Electrical Lighting		TBD	In Progress	\$70,000	
129	LS	Skid Bent and Truss Steel Erection	I&A 11/05/08	Approved 11/10/08	Executed 11/25/08	\$14,712,500	
129S1	LS	Skid Bent and Truss Steel Erection Acceleration	I&A 3/09/09	Approved 3/5/09	Executed 4/01/09	\$535,000	
129S2	LS	Skid Bent and Truss Steel Erection Incentive	I&A 6/9/09	Approved 6/4/09	Executed 6/17/09	\$1,177,000	
179	LS	ETI Truss Steel Erection Falsework Foundations	I&A 4/20/09	N/A	Executed 4/08/09	\$312,000	
181		Skid Bent/Beam and Truss Erection Support		N/A	In Progress	\$500,000	
112	FA	Material Procure Skidbent (1532 Tower Legs)	I&A 1/10/08	Approved 2/4/08	Executed 2/19/08	\$2,000,000	
112S1	FA	Material Procure ETI Superstructure	I&A 3/03/08	Approved 3/5/08	Executed 3/17/08	\$8,500,000	
112S2	FA	Material Procure ETI Temporary Bypass Structure	I&A 6/04/08	Approved 6/16/08	Executed 6/25/08	\$3,500,000	
112S3	FA	Material Procure - Additional Funds	I&A 10/31/08	Approved 11/13/08	Executed 11/25/08	\$3,000,000	
112S4	FA	Material Procure - Additional Funds		Approved 7/15/09	Executed 7/16/09	\$1,500,000	
116	FA/LS	Fabricate Superstructure & Skidbent	I&A 6/04/08	Approved 6/16/08	Executed 8/8/08	\$14,166,180	\$1,349,560
116S1	FA/LS	Skidbeam Design Modifications and Shipping Costs	I&A 12/19/08	Approved 12/23/08	Executed 2/3/09	\$1,896,750	ψ1,υ43,υ00
116S2	FA/LS	Skidbeam Design Modifications and Shipping Costs		Approved 7/15/09	Executed 7/16/09	\$300,000	
140	LS	Truss Steel Fabrication	I&A 9/04/08	Approved 9/04/08	Executed 9/23/08	\$10,920,525	
140S1	ACUP	Truss Fabrication Incentive		Approved 9/04/08	Executed 7/6/09	\$300,000	
166	LS	Skid Bent & Beam Fabrication Acceleration	I&A 12/22/08	Verbal Approval 11/06/08 Approved 12/23/08	Executed 1/28/09	\$2,028,950	
166S1	ACUP	Skid Bent & Beam Fabrication Incentive		Approved 12/23/08	Executed 5/15/09	\$900,000	



167	LS	TMF – Shop Drawing Delay		N/A	Executed 5/6/09	\$632,670	
184	LS	Truss Design Modifications and Acceleration Costs (Partial Payment)	I&A 5/20/09	Approved 6/4/09	Executed 6/12/09	\$3,000,000	
184S1	LS	Truss Design Modifications and Acceleration Costs (Partial Payment)		8/6/09	In Progress	\$4,393,420	
214		Truss Fabrication Acceleration Field Adjustments		N/A	In Progress	\$900,000	
187	FA	Temporary Bracing for Truss Exterior Stringers		N/A	Executed 7/16/09	\$150,000	
193	LS	Skid Beam Design Modifications	I&A 7/7/09	N/A	Executed 7/16/09	\$256,140	
206		DCCI Support Costs (Skid Bent Fabrication)		N/A	In Progress	\$200,000	
144	FA	Expansion Joint Mock-up	I&A 8/26/08	N/A	Executed 9/23/08	\$850,000	
144S1	FA	Expansion Joint Fabrication	I&A 2/03/08	Approved 2/5/09	Executed 4/06/09	\$2,900,000	
149	FA	Bearing Fabrication	I&A 11/03/08	Approved 11/10/08	Executed 11/25/08	\$1,600,000	
153	LS	Concrete Deck and barrier starter steel	I&A 6/23/09	Approved 6/4/09	Executed 7/6/09	\$2,389,940	(\$378,266)
154	LS	East Pile Deduct at BW6, East Pile	N/A	N/A	Executed 9/04/08	(\$400)	
154S1	LS	Pile Anomaly Deduction at A6W & B52A	N/A	Approved 11/13/08	Executed 11/25/08	(\$2,183)	
160	FA	Existing Truss Retrofit Fabrication	I&A 4/20/09	N/A	Executed 4/08/09	\$350,000	
170		Existing Truss Strengthening Erection YB-4		N/A	In Progress	\$413,600	(\$336,400)
175	LS	Existing Truss Strengthening Erection Stability Bracing at YB 3	I&A 6/22/09	N/A	In Progress	\$311,144	(\$188,856)
164	LS	ETI Steel Erection Crane Runway Trestle	I&A 11/20/08	ATP 11/14/08 Approved 12/23/08	Executed 12/6/09	\$2,700,000	
169	LS	Skid Beam Jobsite Handling and Local Transportation Costs	I&A 1/02/09	Approved 12/23/08	Executed 2/25/09	\$1,095,020	
171	LS	Bridge Roll Out / Roll In	I&A 6/8/09	Approved 6/4/09	Executed 6/17/09	\$10,147,370	(\$328,820)
172	LS	Lead Paint Abatement and Access at YB-3	I&A 12/18/08	N/A	Executed 2/4/09	\$210,450	
174	FA	ETI Steel Barrier Rail Transition Fabrication	I&A 5/20/09	N/A	Executed 6/17/09	\$350,000	
177		Span YB-4 and Skid Bent Demolition		TBD	Future	\$11,853,500	
186	LS	TMP (Lane Closures and CMS)		Approved 6/4/09	In Progress	\$2,390,910	(\$609,090)
198		Job Wide Stripping Plan (ETI Portion)		TBD	In Progress	\$48,415	
		ETI OGAC on Bridge Deck		TBD	Future	\$0	
		District work – road signage, stage construction, SWPPP, Temp k-rail, etc		TBD	Future	\$268,125	
		CCM's Labor Day Support Costs					
204		Expansion Joint Seal Installation (previously CCO 189)		Approved 7/15/09		\$3,500,000	
		ETI Steel Barrier Rail Transition Installation (previously CCO 190)					
		Stability Bracing at YBI (Previously CCO 175) Bearing Installation (previously CCO 191)					
204S1		Barrier Rail Installation (previously CCO 202) Additional Funds (If needed)		TBD	Future	\$1,400,000	
207		Field Design Modifications Truss – Fabrication (U1, U8, L1, L8)		N/A	In Progress	\$400,000	(\$4.400.05)
		Field Design Modifications Truss – Erection (U1, U8, L1, L8)		N/A	In Progress	\$500,000	(\$1,100,000)
		East Tie-In	-	=		\$138,431,411	(\$1,591,875)



Budget Status

The Contractor's bid price to construct the Contractor's design for the East Tie-In was \$6.0M with an additional \$1.46M to demolish the remaining portion of the ETI YB-4 span. The Department's December 14, 2006 Strategy Memorandum estimated an additional cost of \$34.0M to construct the Department's ETI roll out/roll in design concept. At the time, this estimate was based on minimal design information available. The June 2009 revised additional cost estimate is \$140.0M, with the current projection at \$138.4M. CCOs executed to date are \$108.7M.

Major cost increases to date are attributed to an increase in steel weight from the 65% to 100% designed plans, along with a market fluctuation in steel price, as well as additional costs to expedite the ETI construction work.

Yerba Buena Island Transition Structures Advance Foundations



Progress of Work

The YBITS foundation and column locations being advanced are W3R/L, W4R/L, W5R/L, W6R/L, W7R/L, W7 Ramp and the temporary E.B. onramp abutment.

W3

3L – substantially completed 3R – column (2nd lift of 2) in progress

4L - substantially completed W4

4R - column (3rd lift of 3) in progress

5L - 75 of 140 piles driven W5

5R - work not started

W6 6L - substantially completed

6R North – column (3rd lift of 3) in progress

6R South - substantially completed

construction of the temporary soil nail wall and soldier pile shoring complete W7

7L North – excavation complete

7L South - substantially completed

7R - footing in progress

Ramp - substantially completed

EΒ On-ramp abutment - temporary shoring piles and permanent CIDH piles have been installed

Status of Contract Change Orders: YBI Transition Structures Advance Foundations

CCO	Method of Payment	Description	HQ Status	TBPOC Status	CCO Status	Current Estimate/ Actual Cost	Change from June 09 Approved Budget
64	FA	YBITS W3L Site Prep and Grading and Construct Access Road	N/A	N/A	Executed 1/8/07	\$150,000	
64S1	LS/FA	YBITS W3L Foundation and Column to Splice Zone, Integrated Shop Drawings for W3L, Concrete Washouts, 50% of Flagging, and Traffic Controls	I&A 3/13/07	Approved 2/15/07	Executed 4/4/07	\$5,835,000	
65	FA	Demo Exist Bridge Adv. Planning	N/A	Approved 4/14/08	Executed 4/18/08	\$175,000	
65S1	LS	Demolish Exist Bridge (Bent 48 to YB-4)	I&A 4/06/09	Approved 5/7/09	Executed 5/21/09	\$9,227,660	(\$88,460)
192		Cable Bracing requires for Demolition of Spans YB-1, YB-2, and YB-3		TBD	In Progress	\$111,540	
70	FA	Integrated Shop Drawings for Remaining YBITS Advance Locations (W3R, W4L/R, W5L/R, W6L/R, W7L/R, and W7 Ramp)	I&A 4/04/07	N/A	Executed 5/1/07	\$500,000	
70S1	FA	YBITS Advance – ISD 3R, 4R/L, 5R/L, 6R/L, 7R/L & ramp	I&A 1/17/08	N/A	Executed 1/30/08	\$450,000	
73	LS	YBITS W3R, W4R, W5R/L, W6R/L, and W7 Ramp Foundations and Columns	I&A 10/24/07	Approved 10/30/07	Executed 11/19/07	\$62,958,990	



75	LS	YBITS W7R/L Foundations and Columns	I&A 4/2/08	Approved 4/3/08	Executed 4/14/08	\$13,125,000	(\$839,190)
75S1	LS	Bent W7 Structure Backfill		Approved 7/15/09	In Progress	\$910,810	(\$659,190)
77	LS	YBITS W4L Foundations and Columns	I&A 6/13/07	Approved 7/27/07	Executed 7/20/07	\$7,125,000	
78	FA	Relocation of Sewer Force Main	N/A	N/A	Executed 7/17/07	\$125,057	
94	LS	YBITS Temp. EB Onramp Abutment Piles and Shoring	I&A 5/18/09	N/A	Executed 5/21/09	\$153,593	(\$246,407)
118	FA	Vibration & Elev. Monitoring at W5L	N/A	N/A	Executed 2/20/08	\$50,000	
118S1	FA/LS/ID	Nimitz House vibration monitoring	N/A	N/A	Executed 8/05/08	\$50,050	
120	LS/Credit	CIDH Pile Mitigation Deduct	N/A	N/A	Executed 3/17/08	(\$400)	
124	FA/LS	Seismic Monitoring & Column Grounding		N/A	Executed 11/25/08	\$353,975	
126	FA	YBITS Excavation / Hazmat Disposal	I&A 4/7/08	Approved 4/3/08	Executed 4/17/08	\$500,000	
145		Revised Mass Concrete Spec. (Elimination of requirement from CCO's 73 & 75)		TBD	In Progress	\$0	
145S1		Credit for eliminated Mass Concrete Work		TBD	In Progress	(\$500,000)	
147	LS	Add Cost W4R Foundation Construction	N/A	N/A	Executed 7/21/08	\$25,024	
155	FA	Excess Soil Offhaul	I&A 8/13/08	N/A	Executed 9/03/08	\$500,000	
159	LS	Redesign Bent W7 Soil Nail Wall	I&A 11/10/08	N/A	Executed 5/21/09	\$916,280	
165	LS	W7 Soil Nail Wall Delay Costs	I&A 4/20/09	N/A	Executed 4/08/09	\$152,208	
185		HazMat Excavation for Bridge Removal		TBD	In Progress	\$106,000	\$106,000
211		Duct Bank Revisions	N/A	N/A	In Progress	\$129,152	(\$20,848)
211S1		Duct Bank Air Line Base Rock	N/A	N/A	In Progress	\$50,000	(ψ20,040)
Current S	tatus for YI	\$103,179,939	(\$1,088,905)				

Budget Status

The Department's December 25, 2006 Strategy Memorandum estimated the cost to construct Bents W3R/L, W4R/L, W5R/L, W6R/L, W7R/L, and W7 Ramp to be \$107M. In addition, the temporary E.B. onramp abutment was added at a later date with no estimate revision. The Departments December 14, 2006 Strategy Memorandum estimated the additional demolition costs for the existing bridge (Bent 48 through YB-4) to be \$3.5M. The combined estimate for both was \$110.5M. The June 2009 revised additional cost estimate is \$104.3M with a current projection of \$103.2M. Total CCOs executed to date are \$102.4M.

Administrative Issues General CCOs



Progress of Work

Administrative issues that remain on the YBID contract are related to setting project milestones and determining time related overhead resulting from the contract time extensions, escalation costs, the increased scope of work, and other necessary changes to the contract. Additionally, costs for implementing COZEEP for the East and West Tie-Ins need to be accounted for.

The following list of target milestones have been incorporated into the project schedule. This information will be revised as more detailed schedule information is developed.

Yerba Buena Island Detour, Contract No. 04-0120R4 Contract Change Order Implementation Strategy July 29, 2009



	Date	Status	Notes
W3L (foundation and column up to splice zone)	March 15 th , 2007	Complete	Finished 3/15/07
West Tie-In Phase 1 Viaduct Demo/Roll-In Complete	September 4 th , 2007	Complete	Finished 9/04/07
Access to W3R Available to CCM	January 2 nd , 2008		Coordinating access with SAS
Upper East Tie-In Area Available to CCM (Revised October 2008)	December 2009	Partial access provided	Coordinating access with SAS
East Tie-In Roll-Out/Roll-In Complete (Revised October 2008)	September 7 th , 2009		
Project Completion (Revised July 2009)	December 10, 2010		

The Department has extended TRO compensation at the original contract rate through September 1, 2009. The Contractor has completed a TRO audit. The Department is reviewing this information so that an appropriate TRO adjustment can be negotiated.

The Department continues to pursue a resolution to the remaining NOPC issues. Of the 18 NOPC issues, only three remain outstanding. Of the three it is anticipated that Viaduct CCO #128 will resolve NOPC #6, resolution of the existing structure demolition costs will resolve NOPC #15, and resolution of the TRO costs will resolve NOPC #18.

Status of Contract Change Orders: Administrative Issues

ссо	Method of Payment	Description	HQ Status	TBPOC Status	CCO Status	Current Estimate/ Actual Cost	Change from June 09 Approved Budget
1 S2	FA	Flagging & Traffic Control	N/A	N/A	Executed 12/5/07	\$200,000	
1S3	FA	Flagging & Traffic Control	N/A	N/A	Executed 7/2/08	\$300,000	
1S4	FA/LS	Flagging & Traffic Control	N/A	N/A	Executed 7/9/09	(\$57,580)	(\$57,580)
13S1	FA	PMIV Additional Funds	I&A 3/10/08	N/A	Executed 3/17/08	\$300,000	
39S1	FA	Additional Funds for Shuttle Service to USCG			Executed 3/30/2009	\$500,000	
45 S1	LS	Additional SWPPP	I&A 12/14/07	N/A	Executed 1/31/08	\$350,000	
51	LS	NOPC 12 & 13 Resolution	N/A	N/A	Executed 8/17/06	\$25,234	
52	0	Elimination of Contractor's Design of Tie-Ins	I&A 1/19/07	N/A	Executed 3/2/07	\$0	
53	FA	Handling and Storage of Material	I&A 11/06/06	N/A	Executed 12/8/06	\$240,000	
56	LS	Contractor's Design additional cost Resolved NOPCs 2,3,4,8,9,10,11,14, and 16	I&A 2/20/08	Approved 3/5/08	Executed 3/17/08	\$6,837,310	
57	LS	Demolition of Building 206	N/A	N/A	Executed 10/18/06	\$22,378	
57S1	LS	Remove and Clear Building 254	N/A	N/A	Executed 6/4/07	\$10,572	
66S1	FA	Video/Photo Documentation Services Supplemental Funds	N/A	N/A	Executed 4/14/08	\$200,000	
66S2	FA	Video/Photo Documentation Services Supplemental Funds		N/A	In Progress	\$200,000	
86	LS	Additional Suspension Costs	N/A	N/A	Executed 5/19/08	\$42,764	
91	LS	Contract Days Extension/TRO Compensation to November 08	RPP 8/28/07	TBD	Executed 10/31/07	\$1,818,948	
91 S1	LS	Base Contract TRO Extension to September 1, 2009	I&A 10/25/07	Approved 10/30/07	Executed 11/16/07	\$8,463,159	
91 S2	LS	Base Contract TRO Extension to December 10, 2010		Approved 7/15/09	In Progress	\$5,494,737	
114		Global TRO Adjustment and TRO Audit		TBD	In Progress	\$6,505,263	
96	FA	SWPPP Steep Slope Stabilization Measures	N/A	N/A	Executed 1/4/08	\$190,000	
96S1	FA	Add Funds Shotcrete Slope at Bent 48	N/A	N/A	Executed 7/2/08	\$40,000	

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109	FA	MEP Coordination	N/A	N/A	Executed 1/30/08	\$100,000	
110	FA	Geotech. Exploration Pads and Support	N/A	N/A	Executed 2/20/08	\$150,000	
119	FA/LS/ID/ UP	Project Wide SWPPP	I&A 4/07/08	N/A	Executed 4/17/08	\$638,939	
123	FA	Treasure Island Yard Lot Rental	I&A 4/16/08	N/A	Executed 4/17/08	\$600,000	
125	FA	Project Access Paving		N/A	Executed 4/04/08	\$150,000	
125S1	FA	Additional Funds, Project Access Paving	I&A 6/12//08	N/A	Executed 6/25/08	\$35,000	
130	LS	Project Retention	I&A 4/07/08	N/A	Executed 4/14/08	\$136,510	
131	FA	Delete Permanent Erosion Control Items		N/A	Executed 5/6/09	(\$74,502)	
132	LS	Storm Damage Slope Repair (Resolved NOPC 17)		N/A	Executed 5/23/08	\$23,870	
139		Revised ESA's		N/A	Executed 5/23/08	\$0	
142	FA	Macalla Road Sinkhole Repair		N/A	Executed 7/18/08	\$150,000	
146	FA	Macalla Road Tree Trimming	N/A	N/A	Executed 7/21/08	\$50,000	
146S1	FA	Add Funds Macalla Road Tree Trimming	N/A	N/A	Executed 11/25/08	\$50,000	
151		Public Safety Spec Change (Suspended Load)			Executed 9/23/08	\$0	
157		USCG Access Mitigation Stairway Design to Quarters Above		N/A	Executed 1/28/09	\$150,000	
176	FA	Construction Staking	N/A	N/A	Executed 4/08/09	\$100,000	
		Non CCO ChargesCOZEEP, lead survey, respirator training			In Progress	\$1,323,000	
182		USCG use parking lots at WTI area Quarters 8		TBD	In Progress	\$300,000	
188		Sound Control Requirements, pile driving restrictions		TBD	In Progress	\$0	
188S1		Sound Control Impacts to W6 & W7 Pile Driving		TBD	In Progress	\$100,000	
195	FA	USCG Stair Access to Quarters 9 along Goat Slope		N/A	In Progress	\$500,000	(\$300,000)
203		SSD Base Camera's		TBD	In Progress	\$700,000	
		Permanent Gawk Screen on North Side Detour Rail		N/A	In Progress	\$200,000	
		PIO Office Labor Day Outreach		N/A	In Progress	\$200,000	
		Macalla Road Repairs		N/A	In Progress	\$200,000	
Current S	Status for A	dministrative and General CCOs				\$37,465,602	(\$357,580)

Budget Status

As of June 2009 the revised additional cost estimate for Time Related Overhead, escalation issues, and job wide changes is \$37.8M with the largest estimated cost being attributed to a global TRO adjustment. As Contract Change Orders for these items are negotiated, this estimate will be updated. Costs related to settlement of NOPC issues not captured here will be paid out of the contract contingency.

Additionally, the original contract allotment provided \$1.3M for COZEEP. Subsequently, there were \$23,000 in other charges for a lead survey and respirator training both related to the WTI Phase 1 demolition work, providing for total non-CCO related charges of \$1.323M to the contract. These costs are shown here to capture costs to the project. It is also important to note that with two full bridge closures planned additional COZEEP funds may be required.

Total CCOs executed to date are \$21.7M.



Memorandum

TO: Toll Bridge Program Oversight Committee DATE: August 4, 2009

(TBPOC)

FR: Tony Anziano, Toll Bridge Program Manager, Caltrans

RE: Agenda No. -

San Francisco-Oakland Bay Bridge Updates

Yerba Buena Island Transition Structures No. 1, Addendum No. 6

Recommendation:

APPROVAL

Cost:

\$ 5,542,980.00 (approx)

Schedule Impacts:

N/A

Discussion:

The items in Addendum No. 6 are shown on Attachment 1: TBPOC Addendum List of Items. The master list of items planned for all addenda are shown in Attachment 2: Addendum Item List, YBITS #1 Contract, Bid Opening December 15, 2009. One more addendum is planned.

Addendum No. 6 includes 8 separate items that covers approximately 5 plan sheet revisions. The PMT reviewed this addendum on Aug. 5, 2009. All comments from BATA and CTC staff have been resolved and incorporated into this addendum.

Some of the key elements of this addendum are:

- To provide visual consistency, replace the light poles and barriers west of Bent 48 of the north side. The south side will be replaced in YBITS #2.
- To reduce pavement noise, change the deck treatment to longitudinal tining.
- Add the working drawing campus specification including delineation of the area at Pier 7 that the contractor will be allotted.
- As identified in the risk management plan, add supplemental funds to mitigate any impacts to the USCG.



Memorandum

- Since the westbound on-ramp will be closed, golden Gate Transit will not service the east side of YBI. Add a shuttle to take riders from the east side to a pick-up point on the west side where they can catch the bus.
- Update the standard specifications and the USCG license to the most current versions.
- Remove A+B bidding.

Attachment(s):

- 1. TBPOC Addendum List of Items
- 2. Addendum Item List, YBITS #1 Contract, Bid Opening December 15, 2009



		ncorporation Project	Notes
Subject	Bid Documents	Addendum / CCO / Other	August 2009
Lighting west of Bent 48. Pole arrangement, foundation design, and concrete barrier. New bid item		1	To provide visual consistency, replace the light poles and barriers west of Bent 48 on the north side. The south side will be replaced in YBITS #2
Bridge Deck Tining: To reduce traffic noise specifications will be changed to require longitudinal tining as opposed to transverse required by current specification		*	To reduce pavement noise, change the deck treatment to longitudinal tining
Add: 1) Working drawing campus specification 2) Plot plan of Pier 7 and Quit Claim Deed and real estate agreement to info H/O 3) New bid items to BEES		√	To reduce risk of delays due to working drawing submittal and approval, add the working drawing campus specifications, including delineation of the area at Pier 7 that the contractor will be allotted.
Add: Supplemental work fund "Mitigation Work for USCG"		√	As identified in the risk management plan, add supplemental funds to mitigate any impacts to the USCG
Add new bid item for: "TEMPORARY SHUTTLE VAN SERVICE"		~	Since the westbound on-ramp will be closed, golden Gate Transit will not service the east side of YBI. Add a shuttle to take riders from the east side to a pick-up point on the west side where they can catch the bus.
Specification Updates		✓	Update the standard specification and the USCG license to the most current versions.
USCG License		✓	
Eliminate A+B Bidding		✓	Remove A+B bidding

CT Toll Bridge Program Div. of Toll Bridge Design

Addenda Item List YBITS #1 Contract, Bid Opening 12/15/09* *Approved 5/7/09 TBPOC Mtg

					Approved 5/7/	09 TBPOC Mtg	Target Delivery Dates								
Line No.	Item No.	Item Description	Owner	Plans (Sheets affected)	Specs	Estimate/Cost Impact? (Yes / No)	Consultant PS&E And ALL ITEMS DUE	Structure PS&E To District	PS&E To BATA, CTC, & DOE	Approval PMT Meeting Date	Approval BATA & DOE	Approval TBPOC Meeting Addendum Sign off & PS&E To HQOE	Publish	Addendum No.	Status
49		Lighting west of Bent 48. Pole arrangement, foundation design, and concrete barrier. New bid item.	Bob - Clive - JV - PB	Yes Sheets E-174, Q-2, 790A/806, 790B/806, 790C/806	Yes 10-3.275, 10-1.41, 10- 1.77	Yes +\$62,980	6/19/2009	7/3/2009	7/20/2009	7/27/2009	8/6/2009	8/6/2009	8/20/2009	6	On Schedule. All items submitted.
50		Bridge Deck Tining: To reduce traffic noise specifications will be changed to require longitudinal tining as opposed to transverse required by current specification.		No	Yes Section 10-1.59	No	6/19/2009	7/3/2009	7/20/2009	7/27/2009	8/6/2009	8/6/2009	8/20/2009	6	On Schedule. All items submitted.
51		Add: (1) Working drawing campus specification (2) Plot plan of pier 7 & Quit claim deed & real estate agreement to info H/O (3) New bid item to BEES	Rob Kobal	No Info Handout Item	Yes Section 10-1.036 Section 5-1.07 edit. Section 5-1.11 Section 5-1.18	Yes +\$1.2M Wrkg Drwg Campus	6/19/2009	7/3/2009	7/20/2009	7/27/2009	8/6/2009	8/6/2009	8/20/2009	6	On Schedule. All items submitted.
52	60	Add supplemental work fund "Mitigation Work for USCG"	Bill Casey	No	No	Yes +\$2,000,000	6/19/2009	7/3/2009	7/20/2009	7/27/2009	8/6/2009	8/6/2009	8/20/2009	6	On Schedule. All items submitted.
53		Add new bid item for "TEMPORARY SHUTTLE VAN SERVICE"	Rob Kobal	No	Yes 10-1.19	Yes + \$2.28M	6/19/2009	7/3/2009	7/20/2009	7/27/2009	8/6/2009	8/6/2009	8/20/2009	6	On Schedule. All items submitted.
54	63	Specification Updates	Laura Rubalcaba	No	Yes 10-1.69 10-1.70 10-1.57	No	6/19/2009	7/3/2009	7/20/2009	7/27/2009	8/6/2009	8/6/2009	8/20/2009	6	On Schedule. All items submitted.
55	62	USCG License	Bob Zandipour	No	Yes Info handout Section 5-1.07	No	6/19/2009	7/3/2009	7/20/2009	7/27/2009	8/6/2009	8/6/2009	8/20/2009	6	On Schedule. All items submitted.
56	64	Eliminate A+B Bidding	Mike Stone	No	Yes Notice to Bidders Section 4 BEES Section 10-1.17 Section 10-1.23	Yes BEES	6/19/2009	7/3/2009	7/20/2009	7/27/2009	8/6/2009	8/6/2009	8/20/2009	6	On Schedule. All items submitted.

Status Legend:

Complete On Schedule In Progress Late -





TO: Toll Bridge Program Oversight Committee DATE: July 30, 2009

(TBPOC)

FR: Jason Weinstein, Senior Program Coordinator, BATA

RE: Agenda No. - 3a

Program Issues

Item- TBSRP Draft Second Quarter 2009 Project Progress and Financial

Update

Recommendation:

For Information / APPROVAL

Cost:

N/A

Schedule Impacts:

N/A

Discussion:

Attached, for information, is the Projected 2009 Second Quarter Report Production Schedule, which reflects the status of completed report tasks and the schedule for remaining actions.

Also included in this package is the Draft Second Quarter 2009 Project Progress and Financial Update for your approval. The report incorporates the revised forecasts but not the most current actual costs. The final report is scheduled to be delivered on August 13, 2009.

Attachment(s):

- 1. Projected 2009 Second Quarter Report Production Schedule
- 2. TBSRP Draft Second Quarter 2009 Project Progress and Financial Update (see end of binder)

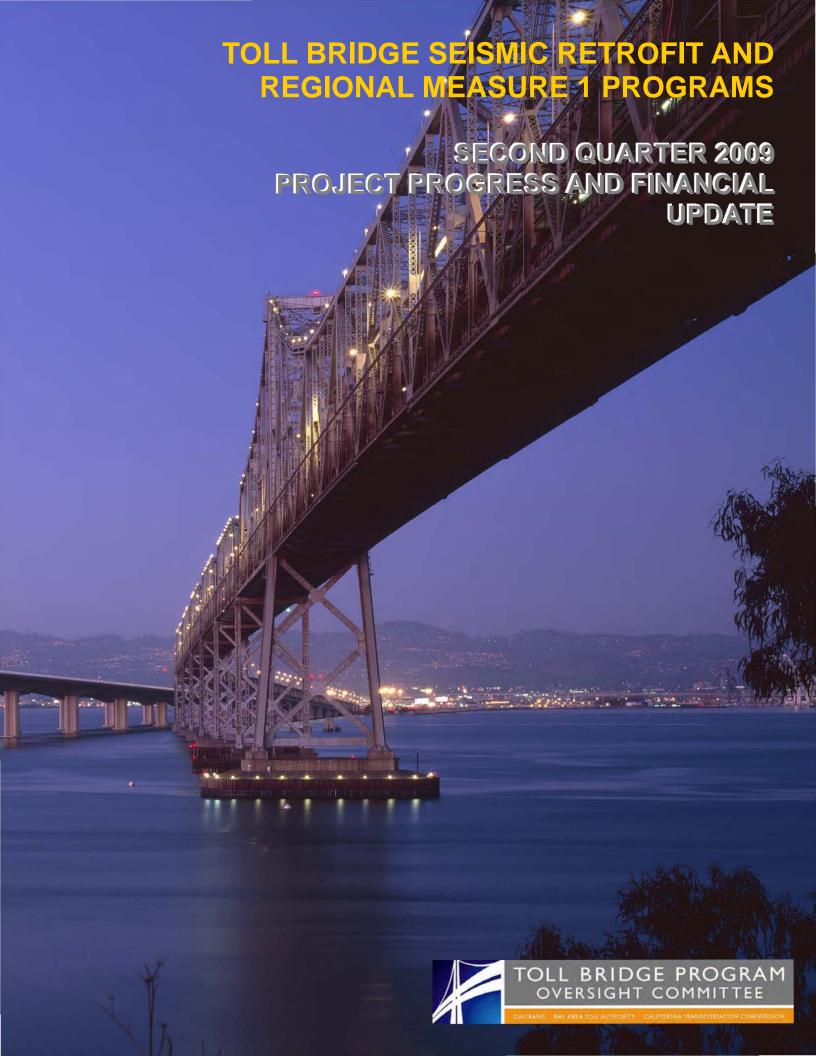
TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA

CALIFORNIA TRANSPORTATION COMMISSION

Projected 2009 Second Quarter Report Production Schedules

2nd Quarter 2009 Report: Legislated Deadline - August 12, 2009	
BAMC Begin Quarterly Report Development; Issue First Call for Input	Monday, June 15, 2009
BAMC Prepare Quarterly Report 1st Draft for PMT, BATA, Caltrans	Monday, July 06, 2009
PMT / BATA / Caltrans Review & Comment on 1st Draft	Thursday, July 09, 2009
BAMC Incorporate Comments: Produce 2nd Draft for TBPOC Review	Friday, July 10, 2009
TBPOC Review & Comment on 2nd Draft	Monday, July 13, 2009
Expenditure Update (Anticipated Date)	Monday, July 20, 2009
BAMC Incorporate Comments; Produce Proposed Final Draft for TBPOC and Agency	Tuesday, July 21, 2009
BAMC Issue Proposed Final Draft to TBPOC & Agency	Thursday, July 23, 2009
TBPOC and Agency Review / Comment on Proposed Final Draft	Friday, August 07, 2009
BAMC Incorporate Comments: Produce Advanced Final Draft + Table of Conflicting Comments	Friday, August 07, 2009
BAMC Incorporate All Final Comments from TBPOC; Emails Final Version for Information	Tuesday, August 11, 2009
Produce & Issue Quarterly Report to Legislature & CTC	Thursday, August 13, 2009





TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

CALTRAN

BAY AREA TOLL AUTHORITY

CALIFORNIA TRANSPORTATION COMMISSION

Toll Bridge Program Oversight Committee
Department of Transportation
Office of the Director
1120 N Street
P.O. Box 942873
Sacramento, CA 94273-0001

August 13, 2009

Mr. Gregory Schmidt Secretary of the Senate State Capitol, Room 3044 Sacramento, CA 95814

Mr. E. Dotson Wilson Chief Clerk of the Assembly State Capitol, Room 3196 Sacramento, CA 95814

Dear Commissioners Schmidt and Wilson:

The Toll Bridge Program Oversight Committee (TBPOC) is pleased to submit the Second Quarter 2009 Project Progress and Financial Update Report. The TBPOC consists of the Director of Caltrans, the Executive Director of the Bay Area Toll Authority (BATA), and the Executive Director of the California Transportation Commission.

On the San Francisco-Oakland Bay Bridge East Span Seismic Replacement Project, this year is one of the most critical for the new east span with a number of milestone activities. On March 12, 2009, we received delivery of a new 1,700 ton capacity shearleg crane barge (the largest on the West Coast) that will be used to lift sections of the new bridge into place. The first shipments of steel roadway sections are scheduled to arrive in the fall, which is several months behind earlier predictions. Finally, an extended weekend closure of the Bay Bridge is scheduled for over the 2009 Labor Day weekend to roll out a section of the existing bridge and to roll in a new section. The new roll-in section will detour traffic off the existing tunnel approach, which allows for the construction of new transition structures from the Self-Anchored Suspension (SAS) bridge to the Yerba Buena Tunnel.

These milestones are being achieved by the hard work and dedication of the contractor, consultants, and Caltrans staff; however, as we have reported in past quarterly reports, we have encountered and will continue to encounter challenges in keeping the project on schedule. Risk management assessments have identified a number of cost and schedule risks to the program. These risks include fabrication challenges and current project progress as compared to what was initially planned.

Based on early discussions with our contractors, we believed that early completion was possible. However, early completion of the project is not likely based on current progress, which has necessitated major cost forecast changes to the program. Project support costs to cover past project delays, including the re-advertisement of the SAS contract and the 12-month schedule extension to maximize the number of bidders for the contract, will result in higher costs that are now reflected in the program cost forecasts. Construction cost forecasts have increased on the SAS and YBI Detour contracts based on identified risks. All told, the risk management process now forecasts that there is a 50% probability that less than \$50 million of the program's contingency funding might remain when the east span project is complete.

For the SAS contract, the major risks relate to fabrication and erection of the various bridge components and the delay of the approval of shop fabrication drawings. As discussed in the reports for the third and fourth quarters of 2008, approval of shop drawings for the East End have yet to be completed, resulting in one of the most important challenges facing the project. The contractor, designers, consultants and Caltrans staff are addressing the challenge and are developing methodologies to mitigate any schedule delays. Details on the actions being taken are described in more detail on page 40.

In March 2009, Caltrans and BATA completed the 65 percent design plans for the seismic retrofits of the Dumbarton and Antioch Bridges. When first developed, the seismic retrofit program excluded these two bridges based on their relatively young age and studies performed at the time. Further seismic vulnerability studies have determined that the bridges are in need of an estimated \$950 million in retrofit work. Full funding for the retrofit work has not yet been identified; however, State Assemblyman Tom Torlakson is sponsoring Bill AB1175 to amend the Toll Bridge Seismic Retrofit Program (TBSRP) to incorporate the Antioch and Dumbarton bridges and to raise tolls to fund the project. The bill has passed the Assembly and now awaits for the committee action in the Senate.

This report is designed to keep the Legislature apprised of the progress and financial status of the TBSRP pursuant to California Streets and Highways Code Section 30952.2. The TBPOC is committed to providing the Legislature with comprehensive and timely reporting on the TBSRP. If there are any questions, or if any additional information is required, please do not hesitate to contact the members of the TBPOC.

Sincerely,

RANDELL IWASAKI Director California Department of Transportation BIMLA RHINEHART Executive Director California Transportation Commission

STEVE HEMINGER Executive Director Bay Area Toll Authority



TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

Toll Bridge Program Oversight Committee
Department of Transportation
Office of the Director
1120 N Street
P.O. Box 942873
Sacramento, CA 94273-0001

August 13, 2009

Mr. Bob Alvarado, Chair California Transportation Commission 1120 N Street, Room 2221 Sacramento, CA 95814

Mr. James Earp, Vice-Chair California Transportation Commission 1120 N Street, Room 2221 Sacramento, CA 95814

Dear Commissioners Alvarado and Earp:

The Toll Bridge Program Oversight Committee (TBPOC) is pleased to submit the Second Quarter 2009 Project Progress and Financial Update Report. The TBPOC consists of the Director of Caltrans, the Executive Director of the Bay Area Toll Authority (BATA), and the Executive Director of the California Transportation Commission.

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For the SAS contract, the major risks relate to fabrication and erection of the various bridge components and the delay of the approval of shop fabrication drawings. As discussed in the reports for the third and fourth quarters of 2008, approval of shop drawings for the East End have yet to be completed, resulting in one of the most important challenges facing the project. The contractor, designers, consultants and Caltrans staff are addressing the challenge and are developing methodologies to mitigate any schedule delays. Details on the actions being taken are described in more detail on page 40.

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Sincerely,

Director California Department of Transportation Chair, TBPOC BIMLA RHINEHART Executive Director California Transportation Commission

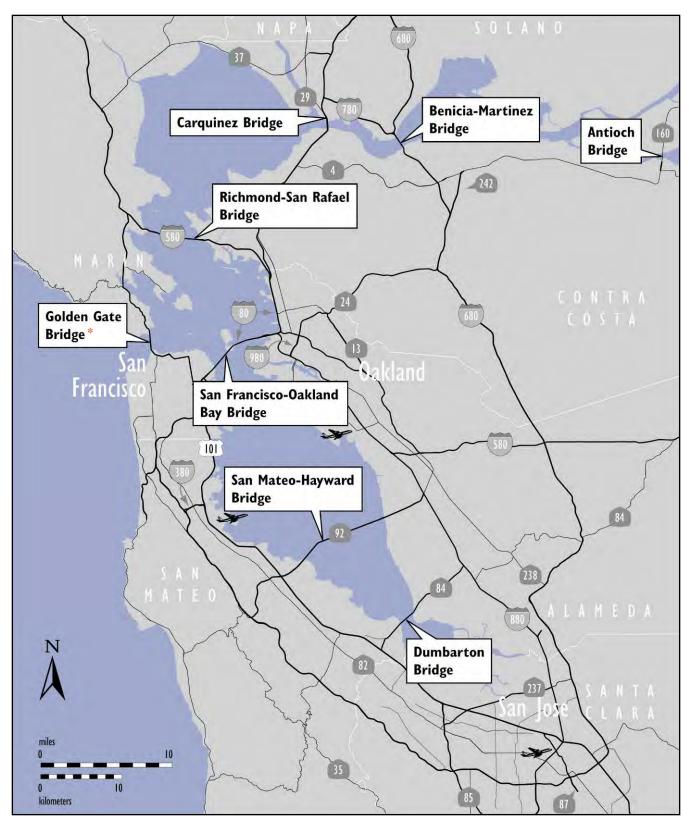
STEVE HEMINGER Executive Director Bay Area Toll Authority



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Map of Bay Area Toll Bridges



^{*} The Golden Gate Bridge is owned and operated by the Golden Gate Bridge, Highway, and Transportation District.

Introduction

In July 2005, Assembly Bill (AB) 144 (Hancock) created the Toll Bridge Program Oversight Committee (TBPOC) to implement a project oversight and project control process for the Benicia-Martinez Bridge project and the State Toll Bridge Seismic Retrofit Program projects. The TBPOC consists of the Caltrans Director, the Bay Area Toll Authority (BATA) Executive Director and the Executive Director of the California Transportation Commission (CTC). The TBPOC's project oversight and control processes include, but are not limited to, reviewing bid specifications and documents, providing field staff to review ongoing costs, reviewing and approving significant change orders and claims in excess of \$1 million (as defined by the committee) and preparing project reports.

AB 144 identified the Toll Bridge Seismic Retrofit Program and the new Benicia-Martinez Bridge Project as being under the direct oversight of the TBPOC. The Toll Bridge Seismic Retrofit Program includes:

Toll Bridge Seismic Retrofit Projects	Seismic Safety Status
San Francisco-Oakland Bay Bridge East Span Replacement	Construction
San Francisco-Oakland Bay Bridge West Approach Replacement	Complete
San Francisco-Oakland Bay Bridge West Span Seismic Retrofit	Complete
San Mateo-Hayward Bridge Seismic Retrofit	Complete
Richmond-San Rafael Bridge Seismic Retrofit	Complete
1958 Carquinez Bridge Seismic Retrofit	Complete
1962 Benicia-Martinez Bridge Seismic Retrofit	Complete
San Diego-Coronado Bridge Seismic Retrofit	Complete
Vincent Thomas Bridge Seismic Retrofit	Complete

The new Benicia-Martinez Bridge is part of a larger program of toll-funded projects called the Regional Measure 1 (RM1) Toll Bridge Program under the responsibility of BATA and Caltrans. While the rest of the projects in the RM1 program are not directly under the responsibility of the TBPOC, BATA and Caltrans will continue to report on their progress as an informational item. The RM1 program includes:

Regional Measure 1 Projects	Open to Traffic Status
Interstate 880/State Route 92 Interchange Reconstruction	Construction
1962 Benicia-Martinez Bridge Reconstruction	Construction
New Benicia-Martinez Bridge	Open
Richmond-San Rafael Bridge Deck Overlay Rehabilitation	Open
Richmond-San Rafael Bridge Trestle, Fender & Deck Joint Rehabilitation	Open
Westbound Carquinez Bridge Replacement	Open
San Mateo-Hayward Bridge Widening	Open
State Route 84 Bayfront Expressway Widening	Open
Richmond Parkway	Open

SUMMARY OF MAJOR PROJECT HIGHLIGHTS, ISSUES, AND ACTIONS



South Tower Lifts1 and 2 Being Trial Assembled



Prepping to Commence Erection of W Line G Towers



Temporary Support Structures for the SAS Bridge Erection

Toll Bridge Seismic Retrofit Program Risk Management

A major element of Assembly Bill 144 of 2005, the law creating the TBPOC, was legislative direction to implement a more aggressive risk management program. Such a program has been implemented in stages over time to ensure development of a robust and comprehensive approach to risk management. We have reached a milestone with our risk management program with all elements now fully incorporated, resulting in one of the most detailed and comprehensive risk management programs in the country today. There is a risk assessment done for each project. The forecast is based on the 50% probable cost of risk (average). It is possible our forecasts could decrease as risks are resolved and retired. Nonetheless, we want to ensure that the public is fully informed of the risks we have identified and the possible expense they could necessitate. It is important to note that the \$740.3 million TBPOC first quarter of 2009 Approved Budget Program Contingency is sufficient to cover identified risks to a 95% confidence level. Ongoing risk mitigation actions will continue to be developed and implemented to reduce the potential draw on Program Contingency (see page 40 for further details).

San Francisco-Oakland Bay Bridge (SFOBB) East Span Seismic Replacement Project

SAS Superstructure Contract

The contractor for the Self-Anchored Suspension (SAS) Bridge, American Bridge/Fluor, continues work on both the fabrication of major bridge components around the world and on the temporary support structures in the bay.

The contractor has reported that fabrication of the steel tower and roadway boxes has fallen several months behind schedule due to the shop fabrication drawing preparation process and the complexity of the fabrication. Delays, including those specifically related to lifts 13 and 14 of the steel roadway boxes at the east end of the bridge, may prevent the westbound opening of the bridge in 2012, but have not yet affected the expected full opening date of the bridge in 2013. The TBPOC and contractor continue to evaluate all options to accelerate the project. Caltrans is also continuing their rigorous



Temporary Tower Truss Erection with Shear-leg Barge Crane



East Tie-in Truss Structure Being Erected on Yerba Buena Island

quality assurance process so that no part of the new bridge will be shipped unless it is fit to be installed.

Out on the bay, the contractor continues to erect and has completed approximately 50 percent of the temporary support structures that span from Yerba Buena Island to the Skyway. These structures will support the SAS bridge before the cable system is installed. With the arrival of the shear-leg crane barge from China on March 12, 2009, the longer and heavier segments of the temporary support structures have been lifted into place.

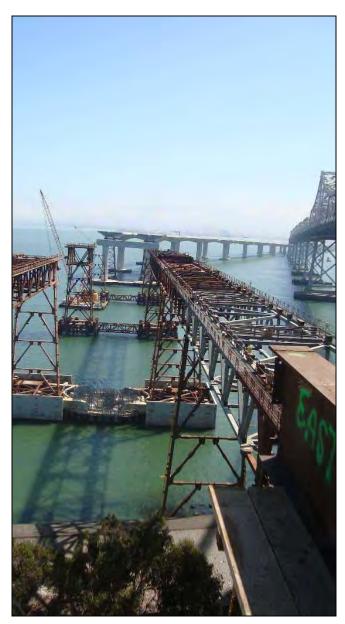
To further mitigate future project risks, Caltrans has established risk management teams to evaluate future potential risks to completing the project on time and on budget. In particular, teams are reviewing cable erection plans and mitigation schedules. Based on the last risk management assessment, there is a potential for a \$305 million increase on the SAS contract.

Yerba Buena Island Detour Contract

The Yerba Buena Island Detour contractor, CC Myers, has erected the detour structure that will divert traffic off the existing bridge to the detour structure that will tie the existing bridge to the Yerba Buena Island tunnel. The traffic switch has been scheduled for Labor Day Weekend 2009 and will require a full closure of the Bay Bridge over an extended holiday weekend. In addition to work on the detour structure, the contractor is making progress on a number of accelerated foundations for the future transition structure from the SAS to the tunnel. Based on the last risk management assessment, there is potential for a \$50 million increase for the contract. Risks include the cost to potentially postpone Labor Day weekend 2009 operations due to unexpected high winds and unexpected construction challenges during the demolition of the old structure. These risks are being addressed via collaborative on-site meetings between Caltrans and the contractor to actively identify and resolve issues early and at the least cost.

Caltrans will be requesting a capital budget revision to the contract from the TBPOC in June 2011 to fund risk mitigation and management actions.

SUMMARY OF MAJOR PROJECT HIGHLIGHTS, ISSUES, AND ACTIONS



View of Temporary Truss Status



Antioch Bridge

TBSRP Capital Outlay Support

Based on initial discussions with our contractors, early completion of the East Span Project was believed to be possible and sufficient to mitigate potential identified support cost increases. The support cost increases are due primarily to the need to re-advertise the SAS contract and by decisions made to increase our opportunities for early completion of the East Span project and potential for support cost savings. These decisions include a 12-month schedule extension provided during bid time to attract the maximum number of bidders for the SAS contract and extension of the YBI Detour contract to advance future foundation and column work of the transition structure and west end deck reconstruction. Since we now judge early completion and the attendant cost savings to be less likely, we forecast a potential drawdown of \$244 million from the program contingency for project support. Further increases in project support costs would be expected if the project is delayed beyond the 2013 forecast bridge opening date.

TBSRP Programmatic Risks

This category includes risks that are not yet scoped within existing contracts and/or spread across multiple contracts. The interdependencies between all the contracts in the program result in the potential for delays on one contract to impact the other contracts in the overall program of contracts. A net potential drawdown of \$84 million from the program contingency is forecast for these risks.

Seismic Retrofit of the Dumbarton and Antioch Bridges

When first conceived, the Toll Bridge Seismic Retrofit Program only identified seven of the nine state-owned toll bridges to be in need of seismic retrofit, excluding the Dumbarton and Antioch bridges. Further seismic vulnerability studies were completed by Caltrans and BATA on those structures, which determined that both structures were in need of retrofit based on current seismic standards. The total cost to retrofit both structures is estimated to be \$950 million. State Assemblyman Tom Torlakson is sponsoring Assembly Bill 1175 to amend the Toll Bridge Seismic Retrofit Program to include the Antioch and Dumbarton bridges and to make the projects eligible for TBSRP funding. Design plans for both bridges are currently being prepared with advertisement oft of the projects expected in 2010.



Benicia-Martinez Bridge Undulation Repair



Site Preparation or New Route 92 and Interstate 880 Separator

Regional Measure 1 Toll Bridge Program Cost Forecast Update

BATA has identified \$30 million in savings from completed Regional Measure 1 (RM1) projects, including the new Carquinez Bridge and San Mateo-Hayward Bridge widening projects. The savings will be transferred to the Toll Bridge Rehabilitation Program for ongoing upkeep of the bridges and related toll facilities.

New Benicia-Martinez Bridge Project

On the 1962 Benicia-Martinez Bridge Modification Contract, remaining tasks include procurement and installation of the outside rail fence of the bridge pedestrians and bicycle path, rehabilitating the Vista Point parking lot, final paving and striping of the main line, and miscellaneous electrical activities. The work is currently three months ahead of schedule.

Interstate 880/State Route 92 Interchange Reconstruction Project

On the Interchange Reconstruction Contract, the new east Route 92 to North Interstate 880 direct connector structure (ENCONN) was completed and opened to detour traffic on May 16, 2009. The Department and BATA have revised the support forecast for the project. The increase in support is due to extended advertisement for the project and weather delays. The project is still forecast to be completed as planned in June 2011.

Toll Bridge Seismic Retrofit Program Cost Summary

Contract Status

AB 144/SB 66 Budget (Jul 2005)

TBPOC Approved Changes

Current TBPOC Approved Budget (June 2009)

Cost to Date (May 2009)

Current Cost Forecast (June 2009)

Cost Variance

Cost Status

				(Julie 2009)				
		a	b	c = a + b	d	е	f = e - c	
FOBB East Span Seismic Replacement								
Capital Outlay Construction								
Skyway	Completed	1,293.0	(38.9)	1,254.1	1,236.8	1,254.1	-	•
SAS Marine Foundations	Completed	313.5	(32.6)	280.9	275.0	280.9	-	•
SAS Superstructure	Construction	1,753.7	-	1,753.7	718.3	2,058.6	304.9	•
YBI Detour	Construction	132.0	360.8	442.2	329.0	542.6	49.8	•
YBI Transition Structures (YBITS)		299.3	(23.2)	276.1	-	285.9	9.8	•
YBITS 1	Advertised				-	223.2		•
YBITS 2	Design				-	59.4		•
YBITS Landscaping	Design				-	3.3		•
Oakland Touchdown		283.8	-	283.8	171.5	289.8	6.0	•
OTD1	Construction				163.6	211.8		•
OTD 2	Design				-	64.0		•
OTD Electrical Systems	Design				-	4.4		•
Submerged Electric Cable	Completed				7.9	9.6		•
Existing Bridge Demolition	Design	239.2	-	239.2	-	232.1	(7.1)	•
Stormwater Treatment Measures	Completed	15.0	3.3	18.3	16.7	18.3	-	•
Other Completed Contracts	Completed	90.3	-	90.3	89.2	90.3	-	•
Capital Outlay Support		959.3	-	959.3	726.3	1,203.1	243.8	•
Right-of-Way and Environmental Mitigation		72.4	-	72.4	51.1	72.4	-	•
Other Budgeted Capital		35.1	(3.3)	31.8	0.7	7.7	(24.1)	•
Total SFOBB East Span Replacement		5486.6	266.1	5,752.7	3,614.6	6,335.8	583.1	
FOBB West Approach Replacement								•
Capital Outlay Construction	Completed	309.0	41.7	350.7	322.8	340.7	(10.0)	•
Capital Outlay Support		120.0	-	120.0	116.1	117.0	(3.0)	•
Total SFOBB West Approach Replacement		429.0	41.7	470.7	438.9	457.7	(3.0)	
Completed Program Projects	Completed	1,839.4	(97.5)	1,741.9	1,712.6	1,741.9	-	•
fiscellaneous Program Costs		30.0	-	30.0	24.7	30.0	-	•
let Programmatic Risks		-	-	-	-	83.9	83.9	•
rogram Contingency		900.0	(210.3)	689.7	-	35.7	(654.0)	•
otal Toll Bridge Seismic Retrofit Program		8,685.0	-	8,685.0	5,790.8	8,685.0	-	•

Within approved schedule and budget

Identified potential project risks that could significantly impact approved schedules and budgets if not mitigated Known project impacts with forthcoming changes to approved schedules and budgets

Toll Bridge Seismic Retrofit Program Schedule Summary

Toll Bridge Seisific Re	AB144/SB 66 Project Completion Schedule Baseline (Jul 2005)	TBPOC Approved Changes (Months)	Current TBPOC Approved Completion Schedule (May 2009)	Current Completion Forecast (May 2009)	Schedule Variance (Months)	Schedule Status	Remarks/Notes
	g	h	i = g + h	j	k = j - i	I	
SFOBB East Span Seismic Replacement							
Contract Completion							
Skyway	Apr 2007	8	Dec 2007	Dec 2007	-	•	See Page 32
SAS Marine Foundations	Jun 2008	(5)	Jan 2008	Jan 2008	-	•	See Page 22
SAS Superstructure	Mar 2012	12	Mar 2013	Mar 2013	-	•	See Page 23
YBI Detour	Jul 2007	41	Dec 2010	Dec 2010	-	•	See Page 16
YBI Transition Structures (YBITS)	Nov 2013	12	Nov 2014	Nov 2014	-		See Page 20
YBITS 1			Sep 2013	Sep 2013	-	•	
YBITS 2			Nov 2014	Nov 2014	-	•	
YBITS Landscaping			TBD	TBD	-	•	
Oakland Touchdown	Nov 2013	12	Nov 2014	Nov 2014	-		See Page 33
OTD 1			May 2010	May 2010	-	•	
OTD 2			Nov 2014	Nov 2014	-	•	
OTD Electrical Systems			TBD	TBD	-	•	
Submerged Electric Cable			Jan 2008	Jan 2008	-	•	
Existing Bridge Demolition	Sep 2014	12	Sep 2015	Sep 2015	-	•	
Stormwater Treatment Measures	Mar 2008	-	Mar 2008	Mar 2008	-	•	
SFOBB East Span Bridge Opening and Oth	ner Milestones						
OTD West bound Access			Jan 2010	Jan 2010	-	•	
YBI Detour Open			Sep 2009	Sep 2009	-	•	See page 18
West bound Open	Sep 2011	12	Sep 2012	Dec 2012	3	•	See page 23
East bound Open	Sep 2012	12	Sep 2013	Sep 2013	-	•	
SFOBB West Approach Replacement						•	
Contract Completion	Aug 2009	(7)	Jan 2009	Jan 2009	-	•	

Notes: 1) Figures may not sum up to totals due to rounding effects.
2) TBSRP Forecasts for the Monthly Reports are generally updated on a quarterly basis in conjunction with quarterly risk analysis assessments for the TBSRP Projects.

Regional Measure 1 Program Cost Summary

	Contract Status	BATA Baseline Budget (Jul 2005)	BATA Approved Changes	Current BATA Approved Budget (June 2009)	Cost to Date (June 2009)	Current Cost Forecast (June 2009)	Cost Variance	Cost Status
		a	b	c = a + b	d	е	f = e - c	
New Benicia-Martinez Bridge								
Capital Outlay Construction	Construction	861.6	174.0	1,035.6	990.4	1,035.6	-	•
Capital Outlay Support		157.1	35.1	192.1	189.3	192.1	-	•
Capital Outlay Right-of-Way		20.4	(0.1)	20.3	17.0	20.3	-	•
Project Reserve		20.8	3.7	24.5	-	24.5	-	
Total New Benicia-Martinez Bridge		1,059.9	212.7	1,272.5	1,196.7	1,272.5	-	
Interstate 880/Route 92 Interchange Reconstruc	tion							
Capital Outlay Construction	Construction	94.8	60.2	155.0	68.6	155.0	-	•
Capital Outlay Support		28.8	34.6	63.4	48.1	63.4	-	•
Capital Outlay Right-of-Way		9.9	7.0	16.9	11.7	16.9	-	•
Project Reserve		0.3	9.4	9.7	-	9.7	-	
Total I-880/SR-92 Interchange Reconstruction		133.8	111.2	245.0	128.4	245.0	-	
Completed Program Projects		918.9	(30.0)	888.9	878.6	888.9		
Total Regional Measure 1 Toll Bridge Program		2,112.6	293.9	2,406.4	2,203.7	2,406.4	-	

Within approved schedule and budget Identified potential project risks that could significantly impact approved schedules and budgets if not mitigated Known project impacts with forthcoming changes to approved schedules and budgets

Regional Measure 1 Program Schedule Summary

	BATA Baseline Completion Schedule (Jul 2005)	BATA Approved Changes (Months)	Current BATA Approved Completion Schedule (May 2009)	Current Completion Forecast (May 2009)	Schedule Variance (Months)	Schedule Status	Remarks/Notes
	g	h	i = g + h	j	k = j - i	1	
New Benicia-Martinez Bridge							
Contract Completion							
1962 BM Bridge Reconstruction	Dec 2009	-	Dec 2009	Aug 2009	(4)	•	See Page 56
New Benicia-Martinez Bridge Opening Date							
New Bridge	Dec 2007	(4)	Aug 2007	Aug 2007	-	•	
Interstate 880/Route 92 Interchange Reconstruction	on						
Contract Completion							
Interchange Reconstruction	Dec 2010	6	Jun 2011	Jun 2011	-	•	See Page 58

Notes: 1) Figures may not sum to totals due to rounding effects.



TOLL BRIDGE SEISMIC RETROFIT PROGRAM

TOLL BRIDGE SEISMIC RETROFIT PROGRAM San Francisco-Oakland Bay Bridge

When a 250-ton section of the upper deck of the East Span collapsed during the 7.1-magnitude Loma Prieta earthquake in 1989, it was a wake-up call for the entire Bay Area. While the East Span quickly reopened within a month, critical questions lingered; how could the Bay Bridge - a vital regional lifeline structure - be strengthened to withstand the next major earthquake? Seismic experts from around the world determined that to make each of the separate elements seismically safe on a bridge of this size, the work must be divided into numerous projects. Each project presents unique challenges. Yet there is one common challenge - the need to accommodate the more than 280,000 vehicles that cross the bridge each day.

West Approach Seismic Replacement Project Project Status: Completed 2008

Seismic safety retrofit work on the West Approach in San Francisco - bounded on the west by 5th Street and on the east by the anchorage of the west span at Beale Street - involved completely removing and replacing this one-mile stretch of Interstate 80, as well as six on and off-ramps within the confines of the West Approach's original footprint. This project was completed on April 8th, 2008.

West Span Seismic Retrofit Project Project Status: Completed 2004

The West Span lies between Yerba Buena Island and San Francisco and is made up of two complete suspension spans connected at a center anchorage. Retrofit work included adding massive amounts of steel and concrete to strengthen the entire West Span, along with new seismic shock absorbers and bracing.



Overview of Yerba Buena Island Detour Structure



Overview of the Completed West Approach Replacement Structure



West Span of the Bay Bridge

East Span Seismic Replacement Project

Rather than a seismic retrofit, the two-mile-long East Span is being completely rebuilt. When completed, the new East Span will consist of several different sections, but will appear as a single streamlined span. The eastbound and westbound lanes of the East Span will no longer include upper and lower decks. The lanes will instead be parallel, providing motorists with expansive views of the bay. These views also will be enjoyed by bicyclists and pedestrians thanks to a new path on the south side of the bridge that will extend all the way to Yerba Buena Island. The new span will be aligned north of the existing bridge to allow traffic to continue to flow on the existing bridge as crews build the new span.

The new span will feature the world's longest Self-Anchored Suspension (SAS) bridge that will be connected to an elegant roadway supported by piers (Skyway), which will gradually slope down towards the Oakland shoreline (Oakland Touchdown). A new transition structure on Yerba Buena Island (YBI) will connect the SAS to the YBI tunnel and will transition the East Span's side-by-side traffic to the upper and lower decks of the tunnel and west span.

When construction of the new East Span is complete and vehicles have been safely rerouted to it, the original East Span will be demolished.

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Architectural Rendering of New Self-Anchored Suspension Bridge



Basting Bridge Demo

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TOLL BRIDGE SEISMIC RETROFIT PROGRAM

San Francisco-Oakland Bay Bridge East Span Replacement Project Summary

The new East Span bridge can be split into four major components - the Skyway and the Self-Anchored Suspension Bridge in the middle and the Yerba Island Transition Structures and Oakland Touchdown approaches at either end. Each component is being constructed by one to three separate contracts that all have been sequenced together.

Highlighted below are the major East Span contracts including their schedules. The letter designation before each contract corresponds to contract descriptions in the rest of the report.

SFOBB East Span Work Sequence Jan. 2008 May 2010 F Nov. 2014 G Mar. 2013 Sep. 2012 D Jan. 2008 Nov. 2014 YBI Transition SAS Skyway Submerged Oakland Oakland Eastbound Westbound Westbound Electrical Cables Touchdown 1 Touchdown 2 Structures Oakland Jun. 2010 Sep. 2015 Mar. 2008 Jan. 2008 YBI SAS Marine Skyway Existing Foundation: Eastbound Bridge Demo 2002 2003 2004 2005 2006 Submerged Electrical Cables WB Open EB Open Oakland Touchdown 1 Oakland Touchdown 2

Note: Dates shown above are project completion dates.

Skyway Westbound Skyway Eastbound

TODAY

TOLL BRIDGE SEISMIC RETROFIT PROGRAM

San Francisco-Oakland Bay Bridge East Span Replacement Project Yerba Buena Island Detour (YBID)

As with all of the Bay Bridge's seismic retrofit projects, crews must build the Yerba Buena Island Transition Structures (YBITS) close to moving vehicles and without disrupting traffic. To accomplish this daunting task, eastbound and westbound traffic will be shifted off the existing roadway and onto a temporary detour supported by 200-foot-tall steel towers. Drivers will use this detour, just south of the original roadway, until traffic is moved onto the new East Span.

A YBID Contract

Contractor: C.C. Myers Inc. Approved Capital Outlay Budget: \$492.8 M Status: 71% Complete

This contract was originally awarded in early 2004 to construct the detour structure for the planned 2006 opening of the new East Span. Due to the readvertisement of the SAS superstructure contract in 2005 because of a lack of funding at the time, the bridge opening was rescheduled to 2013. To better integrate the contract into the current east span schedule and to improve seismic safety and mitigate future construction risks, the TBPOC has approved a number of changes to the contract, including adding the deck replacement work near the tunnel that was rolled into place over Labor Day Weekend 2007, advancing future transition structure foundation work and making design enhancements to the temporary detour structure.

These changes have increased the budget and forecast for the contract to cover the revised project scope and potential project risks.



Successful Labor Day Weekend 2007 Roll-In of Replacement Tunnel Approach Roadway

Tunnel Approach Roadway Replacement

The first in a series of activities to open the detour viaduct was completed in 2007 with the replacement of a 350-foot long stretch of upper deck roadway just east of the Yerba Buena Island tunnel. During this historic milestone, the entire Bay Bridge was closed over the 2007 Labor Day weekend so crews could demolish and replace the old section of the deck with a seismically upgraded 6,500-ton precast section of viaduct that was literally pushed into place (see photo above).

Status: Completed.

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Detour Viaduct Fabrication and Construction

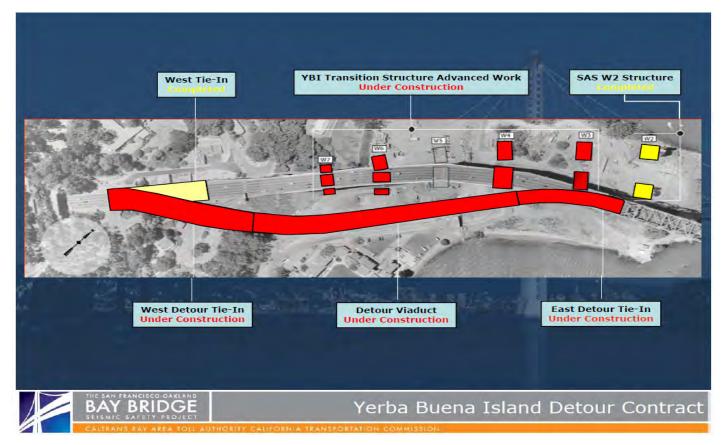
The detour viaduct will run generally parallel to the existing lanes on the island and will tie back into the existing bridge and tunnel. While speed limits will be reduced due to the turns needed to get on and off the detour, the viaduct will look quite similar to the existing bridge with steel cross beams and girders and a concrete roadway deck. To insure a good fit, the steel viaduct truss members were pre-fitted during fabrication in South Korea and Oregon. Opening of the detour to traffic is discussed on the following page.

Status: Most of the center portion of the detour viaduct has already been erected, including the concrete decks. At the west end of the detour, a cast-in-place concrete transition span has been poured to connect the detour into the completed tunnel approach roadway replacement span. At the east end, support structures and falsework, which are being erected to facilitate the roll-out/roll-in of the last truss section that will tie the detour into the existing bridge, are nearly complete.

Demolition of Existing Viaduct

After shifting traffic onto the detour structure, crews will focus on the demolition of the existing transition structure into the tunnel. The old transition structure will need to be removed before construction of the new transition structures from the SAS bridge to the YBI tunnel can be completed.

Status: The start of the demolition is pending the opening of the detour.



Overview of Yerba Buena Island Detour Contract Scope of Work and Current Status

TOLL BRIDGE SEISMIC RETROFIT PROGRAM Yerba Buena Island Detour (YBID) East Tie-in Opening Activities

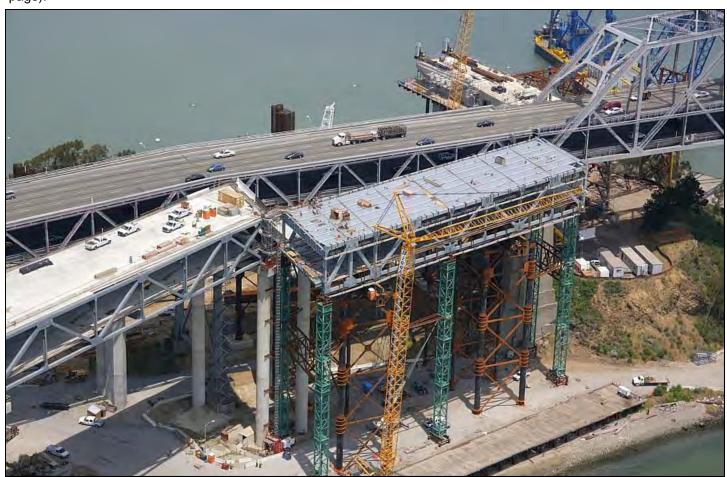
Shifting traffic to the Yerba Buena Island detour will be the most significant realignment of the bridge to date. To accomplish this, crews will cut away a 288-foot portion of the existing truss bridge and replace it with a connection to the detour. This dramatic maneuver will involve aerial construction that occurs more than 100 feet above the ground. When the Bay Bridge reopens to traffic, vehicles will travel on the detour until the completion of the new East Span.

A detailed step-by-step construction sequence for the rollout of existing span and roll-in of the new truss at the east tie-in to the detour viaduct structure is provided on the facing page.

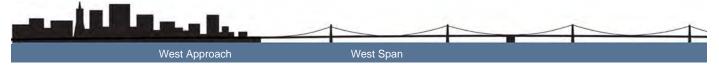
Status: The YBID contractor is currently at Stage 2 and the roll-in truss is being constructed on top of the skid bent (see photo below and *Stage 2* on the diagram on the facing page).



East Tie-In Roll In Truss Upper and Lower Decks



Yerba Buena Island Detour East Tie-In Structure



East Tie-in Activities From Now through August 2009



Stage 1 — As the detour viaduct is being constructed (left), a support structure of falsework will be erected to support the new and existing trusses and the skid bent girders on which the trusses will move.



Stage 2 — The new roll-in truss will be constructed atop the skid bent just south of the existing truss.



Stage 3 — When the roll-in truss and detour viaduct are ready to be installed and opened to traffic, the Bay Bridge will be closed to all traffic.

East Tie-in Activities Over Labor Day Weekend 2009



Stage 4 — After the bridge is closed, the existing truss will be cut loose at both ends and will be rolled out hydraulically using jacks similar to those used for the Labor Day 2007 move to push the truss aside.



Stage 5 — After the existing truss has been rolled out of the way, the new truss will be similarly rolled into place using the same hydraulic jacking system.



Stage 6 — After being rolled into place, the new truss will be secured to the detour viaduct and existing bridge and the Bay Bridge will be re-opened to traffic. Removal of the rolled out span will commence soon after the new truss is secured.

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rerba Buena Island Detour SAS Skyway Oakland Touchdown

TOLL BRIDGE SEISMIC RETROFIT PROGRAM

San Francisco-Oakland Bay Bridge East Span Replacement Project Yerba Buena Island Transition Structures (YBITS)

The new Yerba Buena Island Transition Structures (YBITS) will connect the new SAS bridge to the existing Yerba Buena Island tunnel, transitioning the new side-by-side roadway decks to the upper and lower decks of the tunnel. The new structures will be cast-in-place reinforced concrete structures that will look very similar to the already constructed Skyway structures. While some YBITS foundations and columns have been advanced by the YBID contract, the remaining work will be completed under three separate YBITS contracts.

B YBITS #1 Contract

Contractor: TBD

Current Capital Outlay Forecast: \$223.2 M

Status: Advertised



YBITS W7L-S, W7 EB Ramp Final Lift Complete

The YBITS #1 contract will construct the mainline roadway structures from the SAS bridge to the YBI tunnel. Work on the structures is scheduled to start once the existing structures have been demolished and removed from the site. An addendum to revise the bid opening date to December 15, 2009 was issued in May.



Rendering of Future Yerba Buena Island Transition Structures (top) with Detour Viaduct (bottom)



YBITS #2 Contract

Contractor: TBD

Current Capital Outlay Forecast: \$59.4 M

Status: In Design

The YBITS #2 contract will demolish the detour viaduct after all traffic is shifted to the new bridge and will construct a new eastbound on-ramp to the bridge in its place. The new ramp will also provide the final link for bicycle/pedestrian access off the SAS bridge onto Yerba Buena Island.

YBITS Landscaping Contract

Contractor: TBD

Current Capital Outlay Forecast: \$3.3 M

Status: In Design

Upon completion of the YBITS work, a follow-on landscaping contract will be executed to re-plant and landscape the area.

Yerba Buena Island Transition Structures Advanced Work

Due to the re-advertisement of the SAS superstructure contract in 2005, it became necessary to temporarily suspend the detour contract and make design changes to the viaduct. To make more effective use of the extended contract duration and to reduce overall project schedule and construction risks, the TBPOC approved the advancement of foundation and column work from the Yerba Buena Island Transition Structures contract.



YBITS Advanced Foundation and Column Work in Progress

TOLL BRIDGE SEISMIC RETROFIT PROGRAM San Francisco-Oakland Bay Bridge East Span Replacement Project Self-Anchored Suspension (SAS) Bridge

If one single element bestows the status of world class on the new Bay Bridge East Span, it is the Self-Anchored Suspension (SAS) bridge. This engineering marvel will be the world's largest SAS span at 2,047 feet in length, as well as the first bridge of its kind built with a single tower.

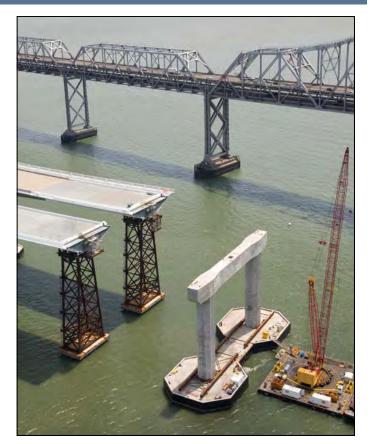
The SAS was separated into three separate contracts – construction of the land-based foundations and columns at Pier W2; construction of the marine-based foundations and columns at Piers T1 and E2; and the construction of the SAS steel superstructure, including the tower, roadway, and cabling. Construction of the foundations at Pier W2 and at Piers T1 and E2 was completed in 2004 and 2007, respectively.

SAS Land Foundation Contract

Contractor: West Bay Builders, Inc. Approved Capital Outlay Budget: \$26.4 M Status: Completed

The twin W2 columns on Yerba Buena Island provide essential support for the western end of the SAS bridge where the single main cable for the suspension span will extend down from the tower and wrap around and under the western end of the roadway deck. Each of these huge columns required massive amounts of concrete and steel and are anchored 80 feet into the island's solid bedrock.





Pier Table at E2

C SAS Marine Foundations Contract

Contractor: Kiewit/FCI/Manson, Joint Venture Approved Capital Outlay Budget: \$280.9 M Status: Completed

The single main suspension cable is anchored at Pier E2 and goes up and over the tower at Pier T1 before wrapping around column W2 on Yerba Buena Island before returning to Pier E2 (see rendering on facing page). Construction of the piers at E2 and T1 required significant on-water resources to drive the foundation support piles down not only to bedrock, but also through the bay water and mud.

The T1 foundation piles extend 196 feet below the waterline and are anchored into bedrock with heavily reinforced concrete rock sockets that are drilled into the rock. Driven nearly 340 feet deep, the steel and concrete E2 foundation piles were driven 100 feet deeper than the deepest timber piles of the existing east span in order to get through the bay mud and reach solid bedrock.

SAS W2

D SAS Superstructure Contract

Contractor: American Bridge/Fluor Enterprises, Joint Venture

Approved Capital Outlay Budget: \$1,753.7 M

Status: 44% Complete

Rising 525 feet above mean sea level and embedded in rock, the single-tower SAS span is designed to withstand a massive earthquake. The SAS bridge is not just another suspension bridge. Traditional main cable suspension bridges have twin cables with smaller suspender cables connected to them. These cables hold up the roadbed and are anchored to separate structures in the ground. While there will appear to be two main cables on the SAS, there will actually only be one. This single cable will be anchored within the eastern end of the roadway, carried over the tower and wrapped around the two side-by-side decks at the western end.

The single steel tower will be made up of four separate legs connected by shear link beams, which function in the same way as a fuse in an electrical circuit. These beams will absorb most of the impact from an earthquake, preventing damage to the tower legs. In addition, if one of the legs is damaged, the other legs will keep the bridge standing.

The next several pages highlight the construction sequence of the SAS and are followed by detailed updates on specific construction activities.



Architectural Rendering of new Self-Anchored Suspension Span

Self-Anchored Suspension (SAS) Construction Sequence

STEP 1 - CONSTRUCT TEMPORARY SUPPORTS

Temporary support trusses will need to be erected from the Skyway to Yerba Buena Island to support the new SAS bridge during construction.

Status: Foundations for the temporary supports are complete. Support columns and trusses are now being installed from west to east.



STEP 2 - INSTALL ROADWAYS

The roadway boxes will be lifted into place by using the shear-leg crane barge. The boxes will be bolted and welded together atop the temporary support trusses to form two continuous parallel steel roadway boxes.

Status: The first shipment of roadway boxes is scheduled for the next quarter.



STEP 3 - INSTALL TOWER

Each of the four legs of the tower will be erected in five separate lifts. The first lift will use the shear-leg crane barge while the remaining higher lifts will use a temporary support tower and lifting jacks.

Status: The first shipment of tower sections is scheduled for late 2009. Tower installation cannot begin until the initial eastbound roadway boxes are installed between the existing east span and new tower.



STEP 4 - MAIN CABLE AND SUSPENDER INSTALLATION

The main cable will be pulled from the east end of the SAS bridge, over the tower, and wrapped around the west end before returning back. Suspender cables will be added to lift the roadway decks off the temporary support structure.

Status: Cable installation is pending the erection of the tower and roadway sections.



STEP 5 - WESTBOUND OPENING

The new bridge will first open in the westbound direction pending completion of the Yerba Buena Island Transition Structures. Westbound access to the Skyway from Oakland will be completed by the Oakland Touchdown #1 Contract in 2009.

Status: Westbound opening is scheduled for 2012.



STEP 6 - EASTBOUND OPENING

Opening of the bridge in the eastbound direction is pending completion of Oakland Touchdown 2, which needs westbound traffic off the existing bridge before the eastbound approach structure can be completed.

Status: Eastbound opening is scheduled for 2013.



Self-Anchored Suspension (SAS) Superstructure Fabrication Activities

Nearly every component of the SAS above the waterline - from the temporary support structures to the roadway and tower box sections to the main cable and suspender ropes - will be fabricated off-site and erected into place upon arrival in the Bay Area. This project is truly global in nature, with fabrication of the bridge components occurring not only in the United States but around the world, in China, the United Kingdom, Japan, South Korea and other locations.

Roadway and Tower Segments

Like giant three-dimensional jigsaw puzzles, the roadway and tower segments of the SAS bridge are hollow steel shells that are internally strengthened and stiffened by a highly engineered network of welded steel ribs and diaphragms. The use of steel in this manner allows for a flexible yet relatively light and strong structure able to withstand the massive loads placed on the bridge during seismic events.

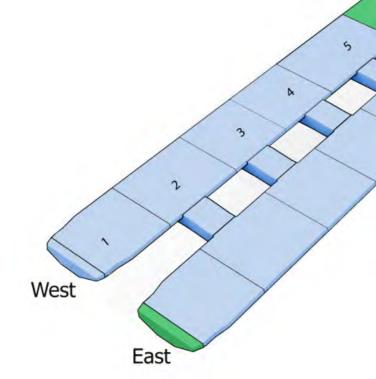
Status: Roadway and tower segments are in various stages of fabrication. Roadway sections 1 through 5 east and west have been assembled for paint and fit up, while roadway sections 6, 7 and 8 are undergoing assembly. Roadway sections 1, 2, 3, and 4 are scheduled to leave China in the next quarter.

Individual subassemblies for roadway sections 9, 10, 11, and 12 are being fabricated. Delays in the preparation of shop drawings for the fabrication of the roadway sections 13 and 14 are putting schedule pressure on the westbound opening of the bridge in 2012

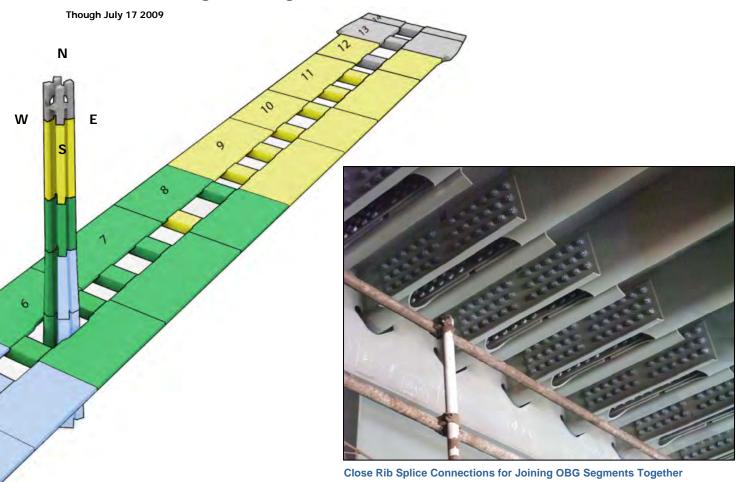
On the tower sections, assembly of the first of five tower lifts is well underway. The second tower lifts have also started to allow for trial fit-up prior to shipping of the first lift as per specification (see additional progress photos on pages 76 through 81).



OBG Lift 3 with the Additional Bracing Installed for the Sea Voyage



Fabrication Progress Diagram







View of the West Line OBG which Contains the abutment Transition

Self-Anchored Suspension (SAS) Superstructure Fabrication Activities

Cables and Suspenders

One continuous main cable will be used to support the roadway deck of the SAS bridge. Anchored into the eastern end of the bridge, the main cable will start on one side of Pier E2, go over the main tower at T1, loop around the western end of the roadway decks at Pier W2, and then back over main tower to the other end of Pier E2. The main cable will be made up of bundles of individual wire strands. Lifting up the roadway decks to the main cable will be a number of smaller suspender cables. The main cable will be fabricated in China and the suspender cables in Missouri.

Status: Initial trial testing of the main cable strands is in progress.



Top Housing Castings in Korea



Cable Band Being Fabricated in the UK

Saddles, Bearings, Hinges, and Other Bridge **Components**

The mounts on which the main cable and suspender ropes will sit are made from solid steel castings. Castings for the main cable saddles are being made by Japan Steel Works, while the cable bands and brackets are being made by Goodwin Steel in the United Kingdom.

The bridge bearings and hinges that support, connect,

and transfer service loads from the SAS bridge to the adjoining sections of the new east span are being fabricated in a number of locations. Work on the bearings is being performed in Pennsylvania and South Korea, while hinge pipe beams are being fabricated in Oregon.



Cable Band

Self-Anchored Suspension (SAS) Superstructure Field Activities



Overview of the Shear-Leg Barge Crane Maneuvering for Placement of Temporary E Line Truss ((D to F)



Shear-leg Barge Crane Placing Temporary E Line Truss (D to F)

Cap Beams

Construction of the massive steel-reinforced concrete cap beams that link the columns at piers W2 and E2 was left to the SAS superstructure contractor and represents the only concrete portions of work on that contract. The east and west ends of the SAS roadway will rest on the cap beams and the main cable will wrap around and tie down upon them.

Status: Completed.

Shear-leg Crane Barge

The massive shear-leg crane barge that will help build the SAS superstructure arrived in the San Francisco Bay on March 12, 2009 after a trans-pacific voyage.

The crane and barge are separate units operating as a single entity dubbed the "Left Coast Lifter." The 400 by 100-foot barge is a U.S. flagged vessel that was custom built in Portland, Oregon by U.S. Barge, LLC and outfitted with the crane by Shanghai Zhenhua Port Machinery Co. Ltd. (ZPMC) at a facility near Shanghai, China. The crane's boom weighs 992 tons and is 328 feet long. The crane can lift up to 1,873 tons, including the deck and tower sections for the SAS, which will begin arriving this summer.

The crane has off-loaded all temporary trusses shipped to date and has lifted 50 percent of the temporary towers' trusses into place. Work on the eastbound side of the SAS must occur first, as the crane cannot reach over permanent westbound decks to work on the eastbound roadway.

Status: On location.



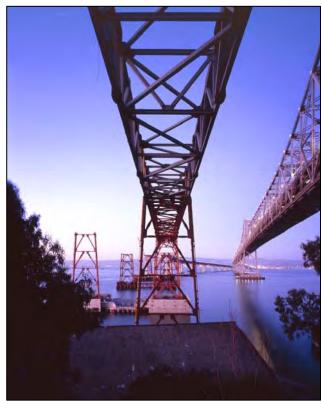
Completed Cross Beam at Pier E2

Self-Anchored Suspension (SAS) Superstructure Field Activities

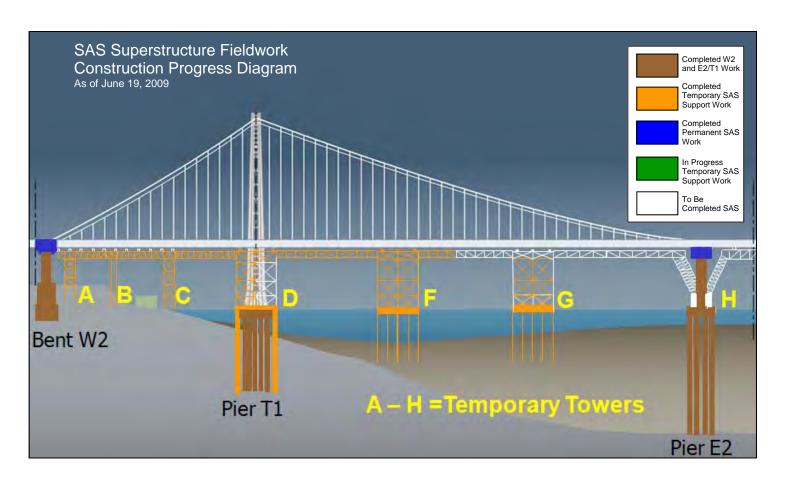
Temporary Support Structures

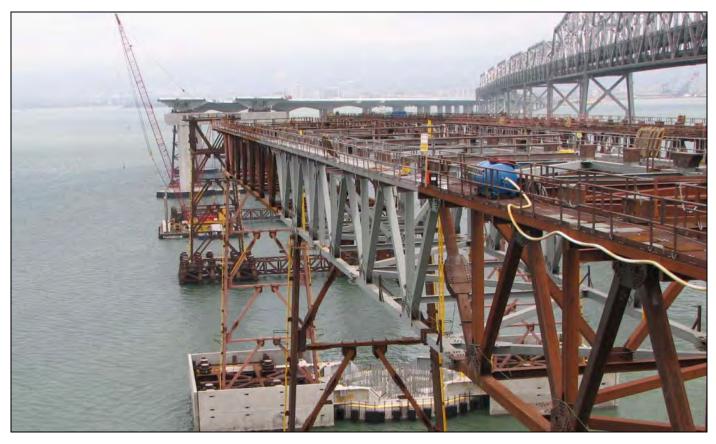
To erect the roadway decks and tower of the bridge, temporary support structures will first be put in place. Almost a bridge in itself, the temporary support structures will stretch from the end of the completed Skyway back to Yerba Buena Island. For the tower, a strand jack system is being built into the tower's temporary frame to elevate the upper sections of the tower into place. These temporary supports are being fabricated in the Bay Area, as well as in Oregon and in China at ZPMC.

Status: The secondary channel between Yerba Buena Island and Oakland has been rerouted. The temporary support foundations and six temporary towers have been completed and approximately half of the temporary trusses are in place. The last remaining shipment will be here in the next quarter.



Temporary Truss Erection on East Bound





Temporary Truss Erection Westbound



Completed Skyway

San Francisco-Oakland Bay Bridge East Span Replacement Project Skyway

The Skyway, which comprises much of the new East Span, will drastically change the appearance of the Bay Bridge. Replacing the grey steel that currently cages drivers, a graceful, elevated roadway supported by piers will provide sweeping views of the bay.

E Skyway Contract

Contractor: Kiewit/FCI/Manson Joint Venture Approved Capital Outlay Budget: \$1,254.1 M Status: Completed

Extending for more than a mile across Oakland mudflats, the Skyway is the longest section of the East Span. It sits between the new Self-Anchored Suspension (SAS) span and the Oakland Touchdown. In addition to incorporating the latest seismic-safety technology, the side-by-side roadway decks of the Skyway feature shoulders and lane widths built to modern standards.

The Skyway's decks are composed of 452 pre-cast concrete segments (standing three stories high), and contain approximately 200 million pounds of structural steel, 120 million pounds of reinforcing steel, 200 thousand linear feet of piling and about 450 thousand cubic yards of concrete. These are the largest segments of their kind ever cast and were lifted into place by winches that were custom made for this project.

The Skyway marine foundation consists of 160 hollow steel pipe piles measuring eight feet in diameter and dispersed among 14 sets of piers. The 365-ton piles were driven more than 300 feet into the deep bay mud. The new East Span piles were battered or driven in at an angle, rather than vertically, to obtain maximum strength and resistance.

Designed specifically to move during a major earthquake, the Skyway features several state-of-the art seismic safety innovations, including 60-foot-long hinge pipe beams. These beams will allow deck segments on the Skyway to move, enabling the deck to withstand greater motion and to absorb more earthquake energy.



Completed Skyway Left of Existing East Span



Western End of Completed Skyway

San Francisco-Oakland Bay Bridge East Span Replacement Project Oakland Touchdown

When completed, the Oakland Touchdown (OTD) structures will connect Interstate 80 in Oakland to the new side-by-side decks of the new East Span. For westbound drivers, the OTD will be their introduction to the graceful new East Span. For eastbound drivers from San Francisco, this section of the bridge will carry them from the Skyway to the East Bay offering unobstructed views of the Oakland hills.

The OTD will be constructed through two contracts. The first contract will build the new westbound lanes, as well as part of the eastbound lanes. The second contract to complete the eastbound lanes cannot fully begin until westbound traffic is shifted onto the new bridge so that a portion of the upper deck of the existing bridge can be demolished to allow for a smooth transition for the new eastbound lanes in Oakland.

F Oakland Touchdown #1 Contract

Contractor: MCM Construction, Inc. Current Capital Outlay Forecast: \$211.8 M Status: 71% Complete

The OTD #1 contract constructs the entire 1,000-footlong westbound approach from the toll plaza to the Skyway. When completed, the westbound approach structure will provide direct access to the westbound Skyway. In the eastbound direction, the contract will construct a portion of the eastbound structure and all of the eastbound foundations that are not in conflict with the existing bridge.

Status: On the westbound structure, the contractor has completed all foundation work and is now proceeding with eastbound superstructure work. Work continues on the eastbound structure's foundations and columns.



Hinge Rebar and Hinge Pipe Blockout Installation

G Oakland Touchdown #2 Contract

Contractor: TBD
Current Capital Outlay Forecast: \$64.0 M
Status: In design

The OTD #2 contract will complete the eastbound approach structure from the end of the Skyway to Oakland. This work is critical to the eastbound opening of the new bridge, but cannot be completed until westbound traffic has been shifted off the existing upper deck to the new SAS bridge.



Sample Light Poles

San Francisco-Oakland Bay Bridge East Span Replacement Project Other Contracts

A number of contracts needed to relocate utilities, clear areas of archeological artifacts, and prepare areas for future work have already been completed. The last major contract will be the eventual demolition and removal of the existing bridge, which by that time will have served the Bay Area for nearly 80 years. Following is a status of some the other East Span contracts.



Archeological Investigations

East Span Interim Seismic Retrofit

Contractors: 1) California Engineering Contractors

2) Balfour Beatty

Approved Capital Outlay Budget: \$30.8 M

Status: Completed

After the 1989 Loma Prieta earthquake, and before the final retrofit strategy was determined for the East Span, Caltrans completed an interim retrofit of the existing bridge to prevent a catastrophic collapse of the bridge should a similar earthquake occur before the East Span was completely replaced. The interim retrofit was performed under two separate contracts that lengthened pier seats, added some structural members, and strengthened areas of the bridge so that they would be more resilient during an earthquake.

Stormwater Treatment Measures

Contractor: Diablo Construction, Inc. Approved Capital Outlay Budget: \$18.3 M

Status: Completed

The Stormwater Treatment Measures contract implemented a number of best practices for the management and treatment of storm water runoff. Focused on the areas around and approaching the toll plaza, the contract added new drainage and built new bio-retention swales and other related constructs.



Existing East Span of Bay Bridge



Storm Water Retention Basin

Yerba Buena Island Substation

Contractor: West Bay Builders

Approved Capital Outlay Budget: \$11.6 M

Status: Completed

This contract relocated an electrical substation just east of the Yerba Buena Island tunnel in preparation for the new East Span.

Pile Installation Demonstration

Contractor: Manson and Dutra, Joint Venture Approved Capital Outlay Budget: \$9.2 M

Status: Completed

While common in offshore drilling, the new East Span is one of the first bridges to use large diameter battered piles in its foundations. To minimize project risks and build industry knowledge, a pile installation demonstration project was initiated to prove the efficacy of the proposed technology and methodology. The demonstration was highly successful and helped result in zero contract change orders or claims for pile driving on the project.

H Existing Bridge Demolition

Contractor: TBD

Approved Capital Outlay Budget: \$239.2 M

Status: In Design

Design work on the contract will start in earnest as opening of the new bridge to traffic approaches.



New YBI Electrical Substation

I Electrical Cable Relocation

Contractor: Manson Construction Approved Capital Outlay Budget: \$9.6 M Status: Completed

A submerged cable from Oakland that is close to where the new bridge will touch down supplies electrical power to Treasure Island. To avoid any possible damage to the cable during construction, two new cables were run from Oakland to Treasure Island to replace the existing cable. The extra cable was funded by the Treasure Island Development Authority and its future development plans.

TOLL BRIDGE SEISMIC RETROFIT PROGRAM **Quarterly Environmental Compliance Highlights**



Overall environmental compliance for the SFOBB East Span project has been a success. All weekly, monthly and annual compliance reports to resource agencies have been delivered on time. There are no comments from

Esparanza, the Peregrine Falcon Nesting at E2

receiving agencies. The tasks for the current quarters are focused on mitigation monitoring. Key successes in this quarter are as follows:

- Bird monitoring was conducted weekly in the active construction area. Bird monitors worked with staff from the Point Reyes Bird Observatory to perform the annual cormorant colony nest counts for the existing East Span. Monitors did not observe any indication that birds were disturbed due to East Span construction activities.
- Peregrine falcon monitoring was conducted twice to four times per week throughout April, May and June 2009. In April monitors confirmed that a pair of falcons • were incubating a clutch of eggs at the E2 nest site on the existing East Span. This is the first time this pair of peregrine falcons has nested at the E2 nest site. The female of the nesting pair was determined to be Esparanza, one of the peregrines that hatched and was banded by United States Fish and Wildlife Service (USFWS) on San Jose City Hall in 2007 as a nestling. In May three nestlings were observed in the E2 nest. During June two of the three nestlings successfully fledged the nest and have been observed flying near the existing East Span and SFOBB construction site at Yerba Buena Island. This is the first peregrine falcon nesting event on the existing East Span since 2007 when the former East Span peregrine falcon pair moved into San Francisco, driving out the former downtown San Francisco peregrine falcon pair.
- Marine mammal, hydroacoustic and bird predation monitoring was conducted during the driving of marine

based piles at SAS Temporary Tower G in April and May.

- On April 10, 2009 National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NOAA-Fisheries) issued a supplemental biological opinion (BO) and conference opinion (CO) for the SFOBB Project. The supplemental BO and CO analyze the effects of remaining SFOBB Project activities on Sacramento River winter-run and Central Valley spring-run Chinook salmon, Central Valley and Central California Coast steelhead, and the Southern distinct population segment of North American green sturgeon.
- Caltrans submitted the final monitoring report for the North Basin Eelgrass Restoration Pilot Program to the San Francisco Bay Conservation and Development Commission (BCDC), NOAA-Fisheries, United Stated Army Corp of Engineers (ACOE), California Department of Fish and Game (CDFG), USFWS, United States Environmental Protection Agency (EPA), Regional Water Quality Control Board (RWQCB), East Bay Parks and California State Parks.
- On June 22 and 23, 2009 a preconstruction bathymetry and eelgrass survey was performed at the eelgrass bed north of the Oakland Touchdown construction site. The survey was needed to avoid and evaluated potential impacts the eelgrass bed prior to construction of the Shorebird Roosting Island, as part of SFOBB construction mitigation.



Bird Monitoring at the Cormorant Colony Nests on the Existing East Span



TOLL BRIDGE SEISMIC RETROFIT PROGRAM Other Completed Projects

The State Legislature in the 1990s identified seven of the nine state-owned toll bridges for seismic retrofit. In addition to the San Francisco-Oakland Bay Bridge, these included the Benicia-Martinez, Carquinez, Richmond-San Rafael and San Mateo-Hayward bridges in the Bay Area, and the Vincent Thomas and Coronado bridges in Southern California. Other than the East Span of the Bay Bridge, the retrofits of all the bridges have been completed as planned.

San Mateo-Hayward Bridge Seismic Retrofit Project Project Status: Completed 2000

The San Mateo-Hayward Bridge seismic retrofit project focused on the strengthening of the high-rise portion of the span. The foundations of the bridge were significantly upgraded with additional piles.

1958 Carquinez Bridge Seismic Retrofit Project Project Status: Completed 2002

The eastbound 1958 Carquinez Bridge was retrofitted in 2002 with additional reinforcement of the cantilever thru-truss structure.

1962 Benicia-Martinez Bridge Seismic Retrofit Project Project Status: Completed 2003

The southbound 1962 Benicia-Martinez Bridge was retrofitted to "Lifeline" status with the strengthening of the foundations and columns and the addition of seismic bearings that allow the bridge to move during a major seismic event. The Lifeline status means the bridge is designed to sustain minor to moderate damage after an event and to reopen quickly to emergency response traffic.



High-Rise Section of San Mateo-Hayward Bridge



1958 Carquinez Bridge (foreground) with the 1927 Span (middle) under Demolition and the New Alfred Zampa Memorial Bridge (background)



1962 Benicia Martinez Bridge (right)

Richmond-San Rafael Bridge Seismic Retrofit Project Project Status: Completed 2005

The Richmond-San Rafael Bridge was retrofitted to a "No Collapse" classification to avoid catastrophic failure during a major seismic event. The foundations, columns, and truss of the bridge were strengthened, and the entire low-rise approach viaduct from Marin County was replaced.



Richmond-San Rafael Bridge

Los Angeles-Vincent Thomas Bridge Seismic Retrofit Project Project Status: Completed 2000



Vincent Thomas Bridge

San Diego-Coronado Bridge Seismic Retrofit Project Project Status: Completed 2002



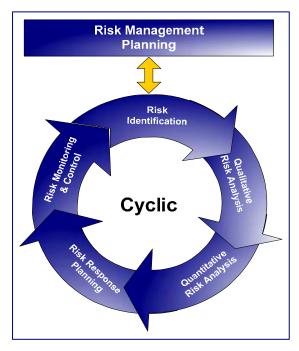
San Diego-Coronado Bridge

TOLL BRIDGE SEISMIC RETROFIT PROGRAM Risk Management Program Update

Assembly Bill (AB) 144 states that Caltrans must "regularly reassess its reserves for potential claims and unknown risks, incorporating information related to risks identified and quantified through its risk assessment processes." AB 144 set a \$900 million Program Reserve (also referred to as the Program Contingency). The Program Contingency is currently at \$740.3 million according to the TBPOC Approved Budget, unchanged from the previous quarter.

The Risk Management Process

Caltrans' approved risk management plan provides for a systemic and continuous process of identifying, analyzing, and responding to project and program risks. Risk management plan implementation provides



for maximizing the probability and consequences of positive events and minimizing the probability and consequences of adverse events to project objectives (e.g., cost, schedule and quality). Each element of the risk management process is shown in Figure 1 above and is explained in the following paragraphs. The risk management cyclic process is performed on a quarterly basis and encompasses all identified risks related to the contracts, program, corridor, capital outlay, capital outlay support, and schedule.

- Risk Management Planning deciding how to approach, plan and execute the risk management activities for the project.
- Risk Identification determining which risks might affect the project and documenting their characteristics.
- Qualitative Risk Analysis prioritizing risks for subsequent further analysis or action by assessing and combining their probability and impacts.
- Quantitative Risk Analysis analyzing numerically the effect of identified risks on overall project objectives.
- Risk Response Planning developing options and actions to enhance opportunities and to reduce impact to project objectives.
- Risk Monitoring and Control tracking identified risks, monitoring residual risks, identifying new risks, executing risk response plans, and evaluating their effectiveness throughout the project life cycle.

Although the risk management processes above are presented as discreet elements with well-defined interfaces, in practice they often overlap and interact with each other.

What Risk Management Does and Does Not Include

Risk management addresses risks that may affect its defined project objectives such as cost, time, scope and quality. Given a project plan, risk management generally looks at ways in which the project may not go according to plan. Risk management focuses on the defined project scope and objectives, and therefore does not include 1) risks or possible decisions that may "kill" the project -- if the project ceases to exist, there are no risks to manage. For example, risk management does not include risks such as the loss of funding, natural disaster that destroys all or part of the construction or acts of governments, and 2) risks or possible decisions that may materially change the project -- if the project objectives are changed substantially, risk management will start afresh on the "new" project. For example, the YBI Detour contract



Need Caption

was materially changed by the addition several YBITS1 project foundations by contract change order as well as certain design enhancements that were made to the east and west "tie-ins" of the YBI Detour structure. The risks of such decisions were not in the risk register of the original contract. In a nutshell, risk management is confined to quantifying risks that are intended to be covered by project and program contingency.

About "Risk" and "Opportunity"

The concept of risk can include both upside as well as downside impacts. This means that the word "risk" can be used to describe uncertainties, which if they occurred, would have a negative or harmful effect, and the same word can also describe uncertainties, which if they occurred, would be helpful. In short, there are two sides to risk - threats and opportunities. A risk that has no threat is a "pure opportunity." It is simply an unplanned good thing which might happen. For example, a new design method might be released, which we can apply to benefit our project. Opportunity is the inverse of threat if a risk has both threat and opportunity. Where a risk variable exists on a continuous scale and there is uncertainty over the eventual outcome, instead of just defining the risk as the downside it might also be possible to consider upside potential. For example, if we have included escalation at 5 percent in our budget for future contracts and this rate could range from say 3 to 7 percent depending on economic conditions at the time

of advertisement, we have an opportunity in the 3 to 5 percent range and a threat in the 5 to 7 percent range. Opportunity and threat exist in the one risk. If the budget were based on 7 percent escalation we would have only opportunity. If based on 3 percent we would have only threat. Threat and opportunity can also depend on how we define the risk. For example, if the risk is that an external agency may relax its requirements and this saves us money relative to what we have budgeted currently in our plan, this is an opportunity. If the risk is defined as the agency may tighten its requirements and this adds to our costs, this is a threat. We can only separate the opportunity and threat if we are certain that the agency may act only one way and not the other. If the risk is that the agency may change its requirements, we could have impacts that range from positive to negative. We would have both opportunity and threat in the same risk, and the degree of each would depend on what we have budgeted in our plan. Uncertainty in the cost of major contract change orders is another example of opportunity. If we enter an estimate into the change order log and the final outcome could range from less than the estimate to more than the estimate, we have both an opportunity and a threat. The degree of opportunity and threat depends on where the estimate lies within the range.

Risk Management for Projects in Design and Construction

Projects in design have the greatest potential for opportunities, because the project is still open to changes. Risk reduction and avoidance are opportunities, as are value analysis, constructability reviews and innovations in design, construction methods and materials. Once a project enters construction, the project objectives (scope, time and cost) are fixed contractually. Any changes are made using a contract change order. The only opportunity to save money or time is from a negative change order such as resulting from a cost reduction incentive proposal by the Contractor. Otherwise, change orders add cost and/or time to the project. So, the prime opportunity during construction is to reduce or eliminate risks.

TOLL BRIDGE SEISMIC RETROFIT PROGRAM Risk Management Program Update (cont.)



SAS Tower Fabrication OBG Segment AA

RISK MANAGEMENT DEVELOPMENTS IN THE FIRST QUARTER OF 2009

The approved TBSRP risk management plan provides for reporting quantitative cost risk results and other risk management information from the previous quarter's risk management assessment. Described below are the main risk management developments and updated quantitative cost risk results for the first quarter of 2009.

SAS Contract

Fabrication and OBG and Tower

Caltrans' quality assurance team (Team China), in concert with the Contractor and its fabricator, continues to implement the "Green Tag" procedures that identify and inspect partially fabricated components at the fabrication shop to ensure that they are in compliance with the contract requirements prior to the next stage of fabrication. "Green Tagging" has streamlined the assembly processes and will mitigate delays from potential rework after assembly.

Team China continues to work to mitigate deck and tower fabrication delays reported in the SAS Contractor's latest schedule update. Efforts to create a new opportunity schedule began last quarter and are expected to continue through the next. Potential responses include the implementation of the additional

shop space Contract Change Order (CCO) and the use of shop space intended for other fabricator projects should the opportunity arise. In addition, Team China is assessing the construction of an environmentally controlled temporary shelter to enable work to continue throughout the summer months sheltered from the weather. Work could proceed in multiple shifts to expedite fabrication.

East End Shop Drawings

As discussed in the reports for the third and fourth quarter of 2008, efforts to perform three-dimensional modeling of the east end orthotropic box girder lifts have been undertaken. The modeling has identified conflicts that were resolved or could be resolved prior to fabrication; however, this was only a preliminary step in the development of shop drawings for these elements. The development and approval of shop drawings has yet to be completed.

During this quarter, the urgency of shop drawing development has escalated to a point where it has become one of the most important challenges on the project. To address this, Caltrans, the designer of record, the SAS Contractor, and its detailer have been assessing how to expedite delivery and approval of the shop drawings while maintaining the quality necessary to minimize the passing of risks into fabrication.

Actions include the co-location of personnel from all stakeholders to the Contractor detailer's offices in Vancouver, Canada. In addition, methodologies to streamline shop drawing approval and to repackage submittals to coincide with the SAS fabricator's anticipated schedule are expected to be implemented.

SAS Cable Installation

The Cable Focus Team meets weekly to address issues and refine plans. It has retained international experts having expertise and experience in cable installation. The Cable Engineering Risk Management (CERM) Team is scheduled to meet in the second quarter of 2009. Efforts to procure S-Wire samples for the design of the cable wrapping machines have proven fruitful.

SAS Opportunity Schedule

The SAS Contractor's March 2009 schedule update (currently under review by Caltrans) indicates that the certain elements may be as much as 12 months behind the Contractor's original baseline schedule. This schedule update has changed the durations for several activities including extending the time for developing shop drawings and fabricating the east end orthotropic box girder (OBG). The schedule recognizes some opportunities in post-fabrication activities, but does not include all potential delays or opportunities. Fabrication continues in China. The March 2009 schedule update shows the first shipment of OBG lifts leaving China in July 2009. Team China continues to monitor fabrication and to look for ways to recover time. While an agreement was made last quarter to potentially mitigate six months of delay by accelerating fabrication, the saving is likely to be less than six months. Negotiations are still underway concerning acceleration and resolution of previous fabrication issues. Caltrans and the Contractor are have developed a joint opportunity schedule to be used in managing the project with the goal of developing and implementing strategies to accelerate corridor completion.

Yerba Buena Island Detour Contract

East Tie-In

Continuing the collaborative on-site meetings at the different fabrication facilities, Caltrans construction and design personnel, in concert with the Contractor, resolved many issues that might have caused significant delay to the traffic switch schedule. In particular, the subcontractor responsible for the east tie-in bridge moving operation relocated to the designer of record's office in San Francisco for 12 weeks to help resolve all issues with the design of the bridge movement system. Caltrans requires a satisfactory contingency plan from the Contractor before the "roll out/roll in" can commence. The plan is expected to be fully developed in the second guarter of 2009. A full bridge closure is scheduled for the 2009 Labor Day weekend. It is optimal for the corridor construction schedule and presents minimal impact to public traffic. The project management team is looking at the possibility of providing the Contractor a four-day

work window to complete the work. The Risk Management Team will conduct workshops to help guide the decision on the appropriate length of time to allocate for this complex work.

Demolition

The initial cost estimates for completing the demolition (Demo) and the W5 foundation by April 30th, 2010 were reassessed this quarter. Several mitigation options were studied in detail. One option was to extend YBID contract time by several months to complete the Demo without incurring any overtime costs and staging the work to not impact the overall corridor schedule. A second option was to add the Demo and W5 work as an addendum to the YBITS #1 project to bid the work in a competitive environment. The Corridor Schedule Team identified additional schedule risks associated with this option.

The contract risk management team had several meetings to assess the cost/benefits of removing the demolition from the YBID project and bidding this work on the YBITS #1 contract. A matrix of risks was quantified which helped the program management to decide that there was less risk by continuing with this work on the YBID contract.

Traffic Switch

The project management team held regular on-site collaborative workshops with the various fabricators to help resolve design and constructability issues in a timely manner. This open line of communication among the Contractor, its subcontractors, and Caltrans' construction, design and material engineering and testing services allows resources to be assigned to critical areas to mitigate any potential delay prior to its occurrence. In addition, this process has also identified innovative ways to accelerate critical components of the work. In particular, the team identified significant bottlenecks in the fabrication processes for the skid beam and truss, and executed a series of CCOs to help accelerate the work to meet the goal of opening the new detour to traffic in the fall of 2009.

Oakland Touchdown Westbound (OTD #1) Contract

The risk of encountering unknown utilities was reduced this quarter, as all the foundations have been completed with no significant conflicts. Unknown utilities were encountered and conflicts resolved quickly. The cost of future potential conflicts is expected to be low. The risk of conflicting or differing opinions over welding has been reduced this quarter. All production piles are complete, and most nonconformance reports were for minor issues. Remaining work includes welding the bike path rails. The cost of remaining potential welding issues is expected to be very low. The OTD #1 Contractor has been successful in reaching 22 percent small business participation.

West Approach Contract

The West Approach construction contract was accepted April 8th 2009. The probable cost of the risks has diminished by approximately 75 percent from the previous quarter. The reduction is due primarily to the retirement of four risks at the completion of construction.

YBI Transition Structure (YBITS #1) Contract

A risk mitigation plan has been adopted to mitigate potential conflicts between electrical/mechanical and structural elements. This plan provides that Integrated Shop Drawings (ISDs) will be performed as part of design to reduce the likelihood of conflicts and potential costs of rework and/or delays. ISD specifications are being prepared that will require the YBITS1 construction Contractor to produce ISDs that include its own work means and methods, as first order of work.

RISK MANAGEMENT LOOK-AHEAD TO THE 2ND QUARTER OF 2009

SAS: Engage Schedule Partnership

The Corridor Schedule Team continues to assess contract schedules. The opportunity schedule development, which began as a joint effort between Caltrans and the Contractor is continuing with a refocused effort with the goal of developing and implementing strategies to accelerate corridor completion.

SAS: East End Detailing

The east end of the OBG (Lifts 12 – 14) is significantly more complicated than the other lifts due to superelevation transitions, horizontal curves, cable anchorages, hinge diaphragms, etc. In the fourth quarter of 2008, three-dimensional modeling of the area was successful in identifying conflicts and complexity issues. The development of shop drawings is expected to be extremely complicated and will require a coordinated effort by Caltrans' design and construction forces and the Contractor. The Working Drawing Campus Team will continue to engage the Contractor and determine ways to expedite shop drawing reviews and minimize rework.

YBI Detour: Detailed event planning for YBI Detour Traffic Switch

The TBPOC, in consultation with the project risk management team, will decide in the second quarter whether a fourth day will be required for the YBI Detour traffic switch. Event and contingency planning will also be finalized in the second quarter and the planning effort will be commensurate with the planning that went into the 2006 and 2007 bridge closures.

YBITS 1: Project Milestone Evaluation and Integrated Shop Drawings (ISDs)

The YBID Contractor must complete the Demo and Pier W5 construction before the YBITS #1 Contractor commences field work. Potential delays may result if

the YBITS#1 structure is ready for Hinge "K" closure, but the SAS Contractor is not ready to vacate the area. To mitigate potential construction delay risks, the bid open date and other project milestones will be continuously reviewed and assessed based on the actual progress of the YBID and SAS contracts. A decision has been made to perform the YBITS #1 ISDs now to resolve potential electrical-mechanical-structural conflicts and revise the contract plans accordingly.

ADEQUACY OF PROGRAM RESERVE (PROGRAM CONTINGENCY)

Potential Draw on Program Contingency

The risk management process calculates the potential draw on program contingency each quarter based on the total of all risks and the contingencies remaining from the contracts.

Each contract in design has an assigned contingency allowance. A contract in construction has a remaining contingency, which is the difference between its budget and the sum of bid items, state furnished materials. contract change orders and remaining supplemental work. Capital outlay support has no identified contingency allowance. The total of the contingencies is the amount that is available to cover the risks of all contracts, program risks, and capital outlay support risks. The amount by which the sum of all risks exceeds the total of all contingencies represents a potential draw on the Program Contingency (Reserve). As of the end of the first quarter of 2009, the 50 percent probable draw on Program Contingency is \$654 million. The \$740.3 million TBPOC first quarter of 2009 Approved Budget Program Contingency is sufficient to cover identified risks to a 95% confidence level. Ongoing risk mitigation actions will continue to be developed and implemented to reduce the potential draw on Program Contingency.

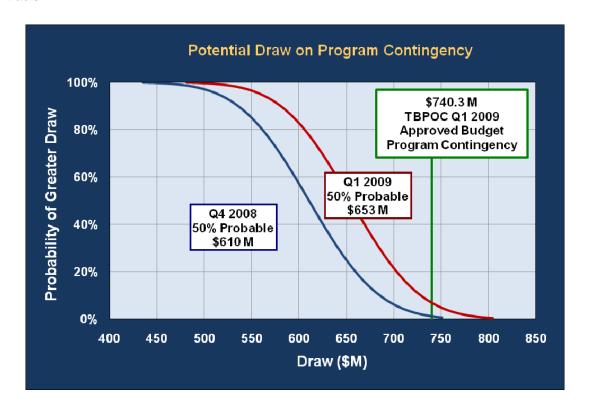


FIGURE 2 – POTENTIAL DRAW ON PROGRAM CONTINGENCY

The curve in Figure 2 can be used to directly read off the probability of exceeding any value of cost. For example, there is about an 80 percent chance that the potential draw on Program Contingency (Reserve) will exceed \$610 million while there is only about a 20 percent chance that it will exceed \$700 million.

TOLL BRIDGE SEISMIC RETROFIT PROGRAM **Program Funding Status**

AB 144 established a funding level of \$8.685 billion for the TBSRP. The bill specifies program funding sources as shown in *Table 1-Program Budget*.

Table 1-Program Budget as of March 31, 2009 (\$ Millions)

	Budgeted	Funding Available & Contributions
Financing	· ·	
Seismic Surcharge Revenue AB 1171	\$2,282	\$2,282.0
Seismic Surcharge Revenue AB 144	\$2,150	\$2,150.0
BATA Consolidation	\$820	\$820.0
Subtotal - Financing	\$5,252	\$5,252.0
Contributions		
Proposition 192	\$790	\$789.0
San Diego Coronado Toll Bridge Revenue Fund	\$33	\$33.0
Vincent Thomas Bridge	\$15	\$6.9
State Highway Account ⁽¹⁾⁽²⁾	\$745	\$745.0
Public Transportation Account ⁽¹⁾⁽³⁾	\$130	\$130.0
ITIP/SHOPP/Federal Contingency	\$448	\$0.0
Federal Highway Bridge Replacement and Rehabilitation (HBRR)	\$642	\$642.0
SHA - East Span Demolition	\$300	
SHA - "Efficiency Savings" (4)	\$130	\$10.0
Redirect Spillover	\$125	\$125.0
Motor Vehicle Account	\$75	\$75.0
Subtotal - Contributions	\$3,433	\$2,555.9
Total Funding	\$8,685	\$7,807.9
Remaining Unallocated		\$747.5
Expenditures		
Capital Outlay		\$4,494.7
State operations	_	\$1,189.5
Total Exp	enditures	\$5,684.2
Encumbtances		
Capital Outlay		\$1,369.0
State operations	_	\$7.2
Total Enc	umbrances	\$1,376.2
Total Expenditures and Encumbrances		\$7,060.4
(1) The California Transportation Commission adopted a new schedule and change 2005. (2) To date, \$645 million has been transferred from the SHA to the TBSRP, includ		
scheduled by the CTC to occur in 2005-06. An additional \$100 million has been ex		
(3) To date, \$130 million has been transferred from the PTA to the TBSRP, includi	ng the full amount	of all transfers
scheduled by the CTC.		
scheduled by the CTC. (4) To date, \$10 million has been transferred from the SHA to the TBSRP, represer Savings" identified under AB 144. Approximately \$120 million remains to be distributed to the transferred from the SHA to the TBSRP, represent the savings of the transferred from the SHA to the TBSRP, represent the savings of the transferred from the SHA to the TBSRP, represent the savings of the savings	nting the commitme	nt of "Efficiency by the CTC.

Program budget includes \$900 million program contingency.

Summary of the Toll Bridge Oversight Committee (TBPOC) Expenses

Pursuant to Streets and Highways Code Section 30952.1 (d), expenses incurred by Caltrans, BATA, and the California Transportation Commission (CTC) for costs directly related to the duties associated with the TBPOC are to be reimbursed by toll revenues. *Table 3-Toll Bridge Program Oversight Committee Estimated Expenses: July 1, 2005 through March 31, 2009* shows expenses through March 31, 2009 for TBPOC functioning, support, and monthly and quarterly reporting.

Table 2 - CTC Toll Bridge Seismic Retrofit Program Contributions Adopted December 2005

Schedule of Contributions to the Toll Bridge Seismic Retrofit Program (\$ Millions)

Source	Description	2005-06 (Actual)	2006-07 (Actual)	2007-08 (Actual)	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	Total
AB 1171	SHA	290									290
	PTA	80	40								120
	Highway Bridge Replacement and Rehabilitation (HBRR)	100	100	100	42						342
	Contingency				1	99	100	100	148		448
AB 144	SHA*	2	8				53	50	17		130
	Motor Vehicle Account (MVA)	75									75
	Spillover		125								125
	SHA**									300	300
	Total	547	273	100	43	99	153	150	165	300	1830

^{* *}Caltrans Efficiency Savings

Table 3—Toll Bridge Program Oversight Committee Estimated Expenses: July 1, 2005 through March 31, 2009 (\$ Millions)

Agency/Program Activity	Expenses
ВАТА	0.8
Caltrans	1.5
стс	0.7
Reporting	2.9
Total Program	5.7



Seismic Retrofit of the Dumbarton and Antioch Bridges

SEISMIC RETROFIT OF DUMBARTON AND ANTIOCH BRIDGES

Dumbarton Bridge Seismic Retrofit Project Project Status: In Design

The Dumbarton Bridge was opened to traffic in 1982 linking the cities of Newark in Alameda County and East Palo Alto in San Mateo County. The 1.6-mile long bridge carries average daily traffic of nearly 60,000 vehicles over its six lanes and has an eight-foot bicycle/pedestrian lane to the south.

Though located between the San Andreas and Hayward faults, the Dumbarton Bridge was not included in the Toll Bridge Seismic Retrofit Program based on evaluations made in the 1990s that concluded the bridge did not warrant retrofitting. The bridge has since been reevaluated for seismic vulnerability based on more recent seismic engineering, which has shown the bridge to be susceptible to damage from a major earthquake.



Mock-up of Dumbarton Pier Columns Undergoing Seismic Testing



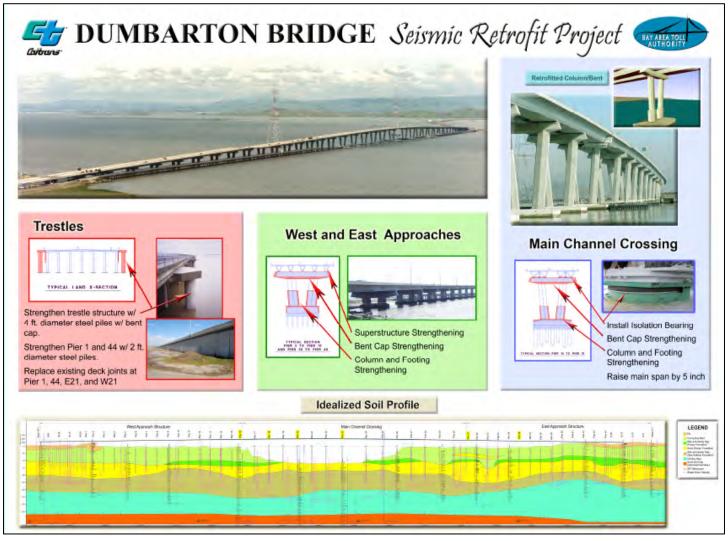
Existing Dumbarton Bridge Looking East towards the Alameda County Foothills

Based on the vulnerability studies and a follow-up sensitivity analysis of seismic risk, Caltrans and BATA decided to take steps towards retrofitting the Dumbarton bridge, even though full funding for the project has not yet been identified. Using BATA toll bridge rehabilitation funding, a comprehensive seismic analysis of the bridge has commenced. This includes detailed geotechnical and geophysical investigations at the bridge and the development of a seismic retrofit strategy and design plans.

The current retrofit strategy for the Dumbarton Bridge includes superstructure and deck modifications, plus strengthening of the over-land approach slab structures. Additional activities are identified in the

attached diagram. The results of the seismic analysis and proposed retrofit strategy have been presented to the Toll Bridge Seismic Safety Peer Review Panel.

Status: Complete plans and specifications are expected by the end of the year. Advertisement of the project is planned for 2010: however, it may be postponed due to delayed environmental permits for the project. The estimated cost of the Dumbarton Bridge seismic retrofit is \$637 million. Full funding for the retrofit work has not yet been identified; however, State Assemblyman Tom Torlakson is sponsoring Assembly Bill 1175 to amend the Toll Bridge Seismic Retrofit Program (TBSRP) to incorporate and fund the Antioch and Dumbarton bridge retrofits.



Seismic Retrofit Strategy Summary for Dumbarton Bridge

SEISMIC RETROFIT OF DUMBARTON AND ANTIOCH BRIDGES

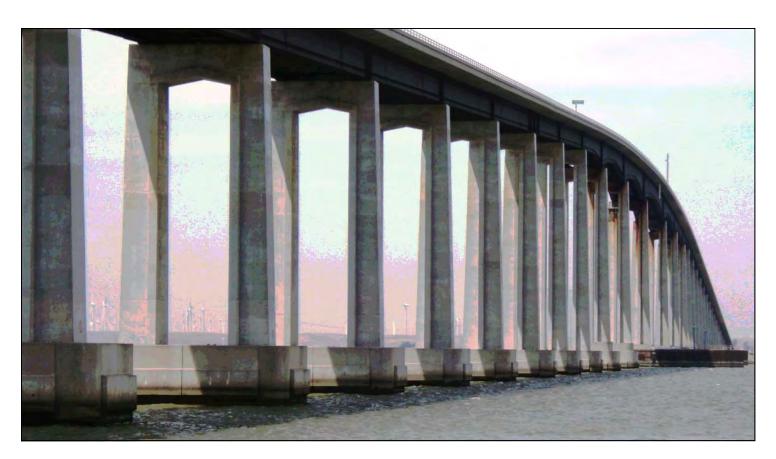
Antioch Bridge Seismic Retrofit Project Project Status: In Design

Serving the Delta region of the Bay Area, the Antioch Bridge takes State Route 160 traffic over the San Joaquin River linking eastern Contra Costa County with Sacramento County. The current bridge was opened in 1978 with one lane in each direction and carries an average of over 10,000 vehicles a day. Approximately 1.8 miles long, the bridge is a steel girder support roadway on reinforced concrete columns and foundations.

Like the Dumbarton Bridge, the Antioch bridge was not included in the Toll Bridge Seismic Retrofit Program based on evaluations made in the 1990s that concluded that the bridge did not warrant retrofitting. The Antioch bridge has since been reevaluated for seismic vulnerability based on more recent seismic engineering, which has shown the bridge to be susceptible to damage from a major earthquake.

Based on the vulnerability studies and a follow-up sensitivity analysis of seismic risk, Caltrans and BATA decided to take steps towards the retrofitting the Antioch Bridge, even though full funding for the project has not yet be identified. Using BATA toll bridge rehabilitation funding, a comprehensive seismic analysis of the bridge has commenced. This analysis includes detailed geotechnical and geophysical investigation at the bridge and the development of a seismic retrofit strategy and design plans.

The current retrofit strategy for the Antioch Bridge includes relatively minor modifications to the approach structure on Sherman Island, addition of isolation bearings, strengthening of the columns, and hinge retrofits. The results of the seismic analysis and proposed retrofit strategy have been presented to the Toll Bridge Seismic Safety Peer Review Panel.

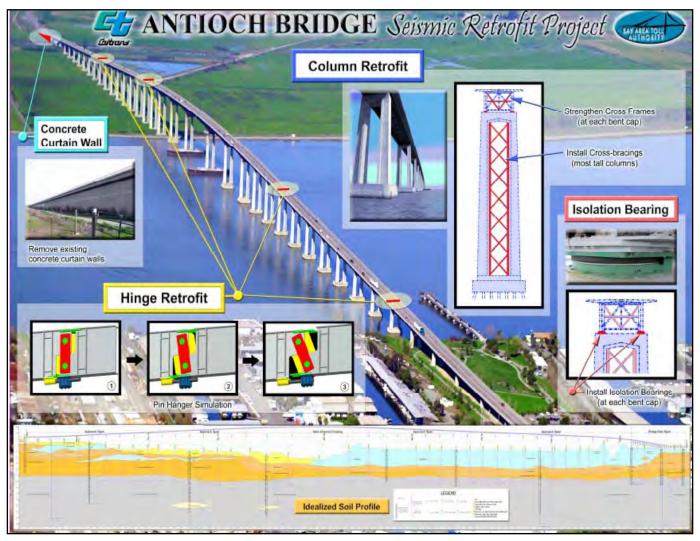


Antioch Bridge

Status: Complete plans and specifications are expected by the end of the year. Advertisement of the project is planned for 2010; however, it may be postponed due to delayed environmental permits for the project. The estimated cost of the Antioch Bridge seismic retrofit is \$313 million. Full funding for the retrofit work has not yet been identified; however, State Assemblyman Tom Torlakson is sponsoring Assembly Bill 1175 to amend the Toll Bridge Seismic Retrofit Program (TBSRP) to incorporate and fund the Antioch and Dumbarton bridge retrofits.



Sample of Lower Half of Isolation Bearing and Slider Used on Benicia Bridge Seismic Retrofit Project

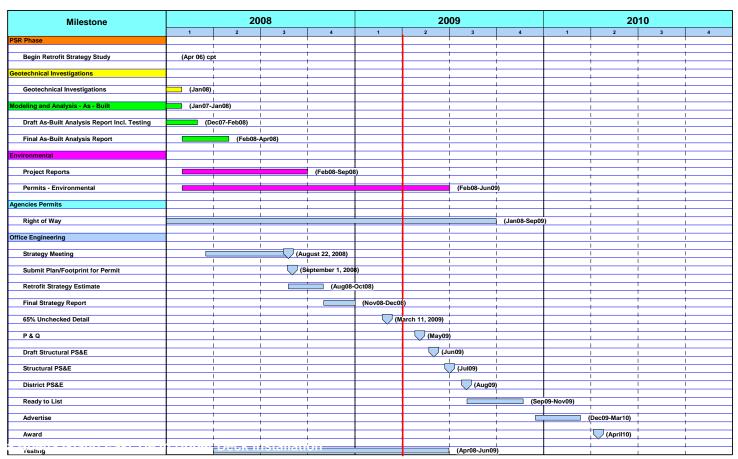


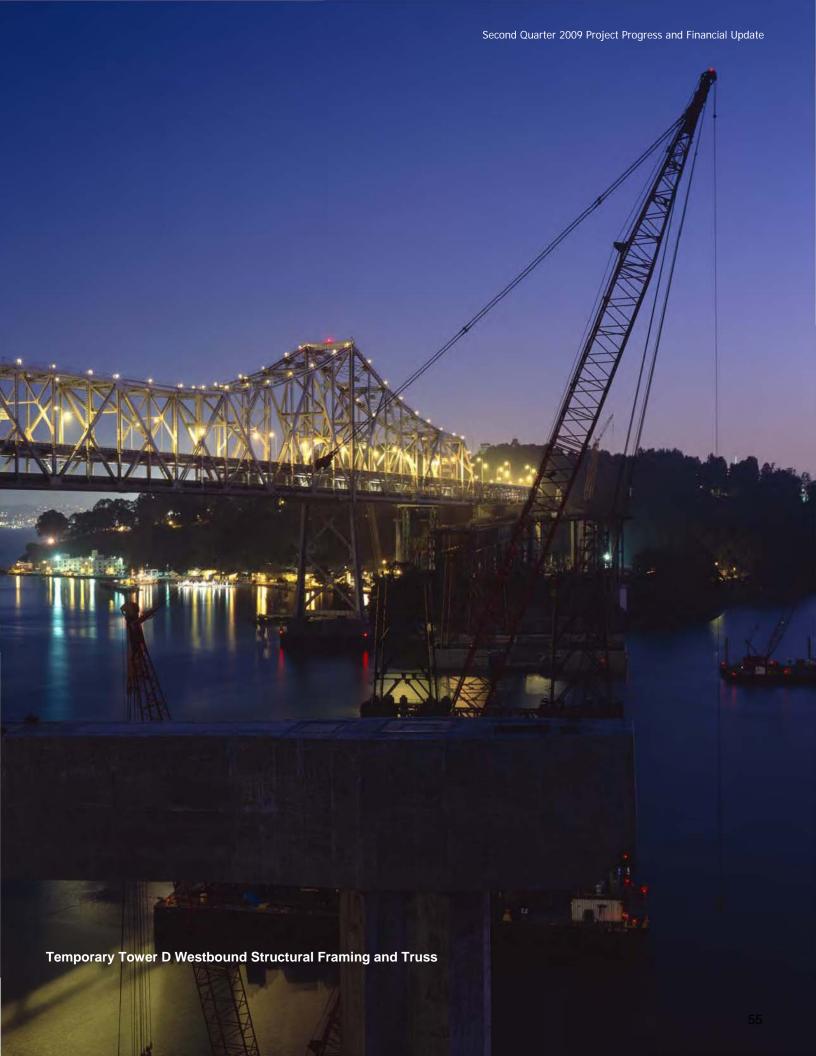
Seismic Retrofit Strategy Summary for Antioch Bridge

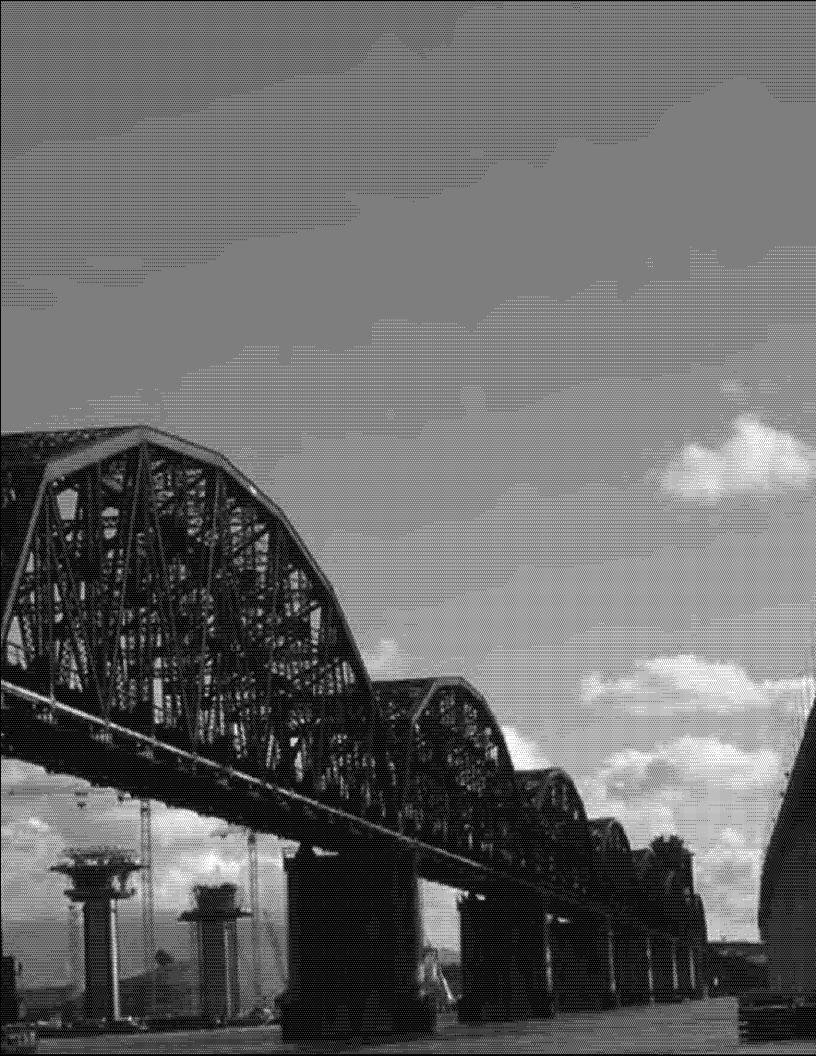
Seismic Retrofits of Dumbarton and Antioch Bridges

Project Cost and Schedule Summaries











REGIONAL MEASURE 1 TOLL BRIDGE PROGRAM

REGIONAL MEASURE 1 PROGRAM

New Benicia-Martinez Bridge Project Project Status: New Bridge Completed 2007

The new Congressman George Miller Bridge opened to traffic in August 2007 taking its place alongside the existing 1962 Benicia-Martinez Bridge, which is named for Congressman Miller's father, the late George Miller, Jr. The new bridge carries five lanes of northbound Interstate 680 traffic, while the existing bridge is being upgraded to carry four lanes of southbound traffic and a new bicycle/pedestrian pathway.

Decades in the planning and construction, the new bridge is designed to a "Lifeline" seismic design standard, expected to be available for emergency response vehicles soon after a major seismic event. Constructed of lightweight concrete, the structure is one of the longest post-tensioned reinforced cast-in-place concrete bridges in the world. The new toll plaza, relocated from Benicia to Martinez, features the Bay Area's first FasTrak® express lanes, which vastly increase the throughput of vehicles using electronic toll collection.



New Benicia-Martinez Bridge Opened to Traffic in August 2007

1962 Benicia-Martinez Bridge Reconstruction Contract

Contractor: ACC/Top Grade, Joint Venture Approved Capital Outlay Budget: \$59.5 M Status: 84% Complete

A two-year project to rehabilitate and reconfigure the original Benicia-Martinez Bridge began shortly after the opening of the new Congressman George Miller Bridge. The existing 1.2-mile roadway surface on the steel deck truss bridge is being modified to carry four lanes of southbound traffic (one more than before) - with shoulders on both sides - plus a bicycle/pedestrian path on the west side of the span that will connect to Park Road in Benicia and to Marina Vista Boulevard in Martinez.

Stage 1 – Reconstruction of East Side of Bridge and Approaches

Completed in August 2008, this stage involved removal of the old toll plaza on the Benicia side of the bridge, deck repairs on the east side of span, and repair of the roadway undulations on the southern approach just south of the Marina Vista interchange.



Mococo Bridge Jacking

Stage 2 – Reconstruction of West Side of Bridge and Approaches and Construction of Bicycle/Pedestrian Pathway

This stage began after southbound traffic was shifted from the west side of the bridge to the newly refurbished east side. It involves repairing the west side bridge deck, repairing undulations on the west side of the roadway in Martinez, demolishing obsolete I-680/I-780 interchange structures, realigning southbound Interstate 680 for four lanes, and construction of the barrier separating traffic lanes from the bicycle/pedestrian path.

Status: Remaining tasks include procurement and installation of the outside rail fence of the bridge pedestrians and bicycle path, rehabilitating the Vista Point parking lot, final paving and striping of the main line, and miscellaneous electrical activities. The work is currently three months ahead of schedule.



Benicia-Martinez Undulation Repair



Benicia-Martinez Undulation Repair

REGIONAL MEASURE 1 PROGRAM

Interstate 880/State Route 92 Interchange Reconstruction Project Project Status: Under Construction

The Interstate 880/State Route 92 Interchange Reconstruction Project is the final project under the Regional Measure 1 Toll Bridge Program. Project completion fulfills a promise made to Bay Area voters in 1988 to deliver a slate of projects that help expand bridge capacity and improve safety on the bridges.

This corridor is consistently one of the Bay Area's most congested during the evening commute. This is due in part to the lane merging and weaving that is required by the existing cloverleaf interchange. The new interchange will feature direct freeway-to-freeway connector ramps that will increase traffic capacity and improve overall safety and traffic operations in the area. With the new direct connector ramps, drivers coming off the San Mateo-Hayward Bridge can access Interstate 880 without having to compete with traffic headed onto east Route 92 from south Interstate 880 (see progress photos on pages 80 and 81).



Future Interstate 880/State Route 92 Interchange (as simulated) Looking West towards San Mateo.

Interstate 880/State Route 92 Interchange Reconstruction Contract

Contractor: Flatiron/Granite

Approved Capital Outlay Budget: \$155.0 M

Status: 52% Complete



Embankment Construction for 92/880 Separator Bridge



Widening at Mount Eden

Stage 1 – Construct East Route 92 to North Interstate 880 Connector

The new east Route 92 to north Interstate 880 connector (ENCONN) is the most critical flyover structure for relieving congestion in the corridor. The ENCONN will be first used as a detour to allow for future stages of work, while keeping traffic flowing.

Status: ENCONN was completed and opened to detour traffic on May 16, 2009.

Stage 2 – Replace South Side of Route 92 Separation Structure

By detouring eastbound Route 92 traffic onto ENCONN, the existing separation structure that carries SR-92 over I-880 can be replaced. The separation structure needs to be elevated to accommodate east Route 92 to north Interstate 880 traffic under it without a loop alignment. The existing structure will be cut lengthwise, and then demolished and replaced separately. In this stage, the south side of the structure will be replaced, while west Route 92 and south Interstate 880 to east Route 92 traffic will stay on the remaining structure.

Status: Work on the demolition of the existing separation structure has started.

Stage 3 – Replace North Side Route 92 Separation Structure

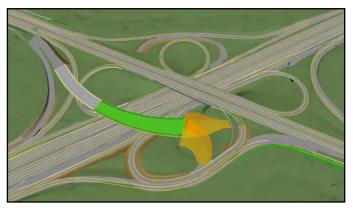
Upon completion of Stage 2, the existing north side of the separation structure will be demolished and replaced. Its traffic will then be shifted onto the newly reconstructed south side.

Status: Pending Stage 2.

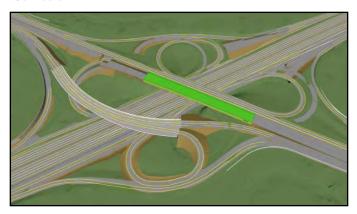
Stage 4 - Final Realignment and Other Work

Upon completion of the Route 92 separation structure, east Route 92 traffic can be shifted onto its permanent alignment from the new ENCONN and directly under the new separation structure. Along with the ENCONN and Route 92 separation structures, several soundwalls, a pedestrian overcrossing on I-880 at Eldridge Avenue and other ramps and structures will also be reconstructed as part of this project.

Status: The soundwalls in the southwest quadrant and northwest quadrant (Stage 1) of the interchange are complete. Work continues on walls in the northwest (Stage 2), southeast and northeast quadrants, as well as on the pedestrian overcrossing. Calaroga Bridge is to begin replacement construction soon. The first stage of the eastbound SR-92 - I-880 overcrossing is in progress. Final realignment is scheduled for mid 2011.



Stage 1 - Construct East Route 92 to North Interstate 880 Direct Connector



Stage 2 - Demolish and Replace South Side of Route 92 Separation Structure



Stage 3 - Demolish and Replace North Side of Route 92 Separation Structure



Stage 4 - Final Realignment and Other Work

REGIONAL MEASURE 1 PROGRAM Other Completed Projects

San Mateo-Hayward Bridge Widening Project Project Status: Completed 2003



This project expanded the low-rise concrete trestle section of the San Mateo-Hayward Bridge to allow for three lanes in each direction to match the existing configuration of the high-rise steel section of bridge.

Widening of the San Mateo-Hayward Bridge Trestle on Left

Richmond-San Rafael Bridge Rehabilitation Projects Project Status: Completed 2006

Two major rehabilitation projects for the Richmond-San Rafael Bridge were funded and completed:

(1) replacement of the western concrete approach trestle and ship-collision protection fender system; and(2) rehabilitation of deck joints and resurfacing of the bridge deck.

In 2005, along with the seismic retrofit of the bridge, the trestle and fender replacement work was completed as part of the same project. Under a separate contract in 2006, the bridge was resurfaced with a polyester concrete overlay along with the repair of numerous deck joints.



New Richmond-San Rafael Bridge West Approach Trestle under Construction

Richmond Parkway Construction Project Project Status: Completed 2001

The final connections to the Richmond Parkway from Interstate 580 near the Richmond-San Rafael Bridge were completed in May 2001.



New Alfred Zampa Memorial (Carquinez) Bridge Soon after Opening to Traffic with Crockett Interchange Still under Construction.

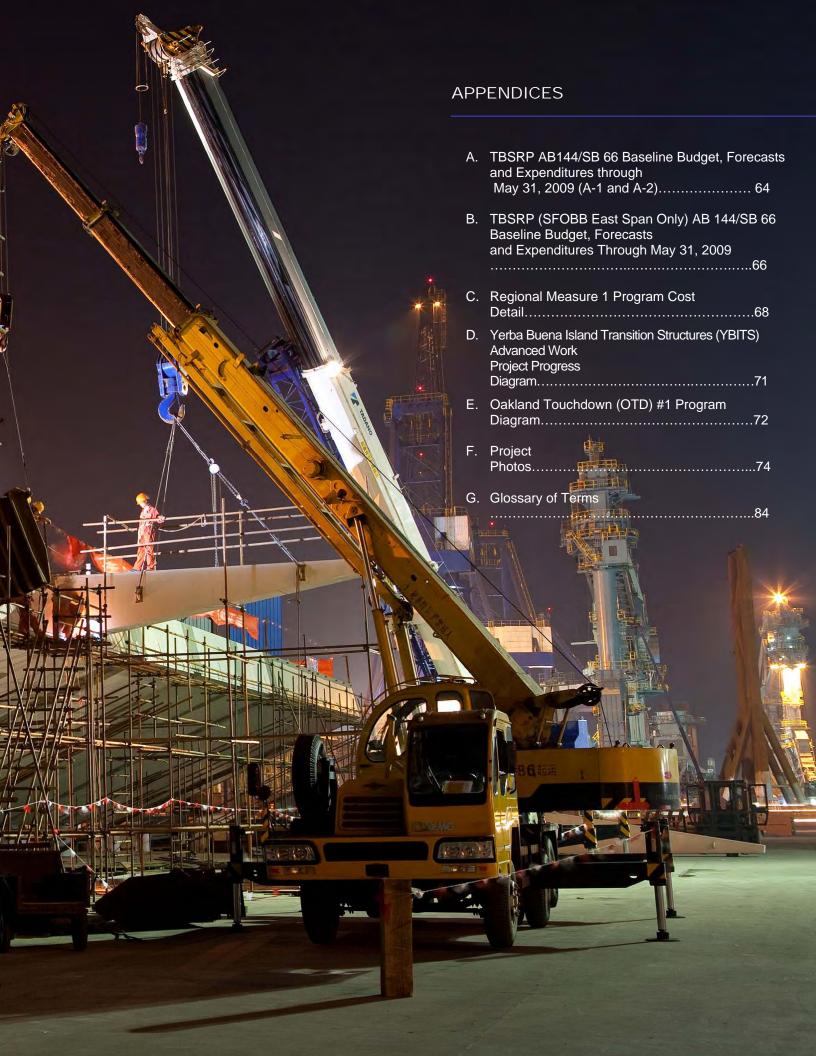
New Alfred Zampa Memorial (Carquinez) Bridge Project Project Status: Completed 2003

The new western span of the Carquinez Bridge, which replaced the original 1927 span, is a twin-towered suspension bridge with three mixed-flow lanes, a new carpool lane, shoulders and a bicycle and pedestrian pathway.

Bayfront Expressway (State Route 84) Widening Project Project Status: Completed 2004

This project expanded and improved the roadway from the Dumbarton Bridge touchdown to the U.S. 101/Marsh Road interchange by adding additional lanes and turn pockets and improving bicycle and pedestrian access in the area.





Appendix A-1: TBSRP AB 144/SB 66 Baseline Budget, Forecasts and Expenditures Through June 30, 2009

_	AB 144 / SB 66 Budget	Approved	Current Approved Budget	Cost To Date	Cost Forecast	At-Completion
Contract	(07/2005)	Changes	(06/2009)	(05/2009)	(06/2009)	Variance
a	С	d	e = c + d	f	g	h = g - e
SFOBB East Span Replacement Project						
Capital Outlay Support	959.3	_	959.3	726.3	1,203.1	243.8
Capital Outlay Support	4,492.2	269.4	4,761.6	2,887.6	5,125.0	363.4
Other Budgeted Capital	35.1	(3.3)	31.8	0.7	7.7	(24.1)
Total	5,486.6	266.1	5,752.7	3,614.6	6,335.8	583.1
SFOBB West Approach Replacement	3,400.0	200.1	3,132.1	3,014.0	0,333.0	303.1
Capital Outlay Support	120.0	_	120.0	116.1	117.0	(3.0)
Capital Outlay Support Capital Outlay Construction	309.0	41.7	350.7	322.8	340.7	(10.0)
Total	429.0	41.7	470.7	438.9	457.7	(13.0)
SFOBB West Span Retrofit	427.0	41.7	470.7	430.7	437.7	
	75.0		75.0	74.8	75.0	-
Capital Outlay Support Capital Outlay Construction	232.9	-	232.9	74.8 227.2	232.9	-
Total	307.9	-	232.9 307.9	302.0	307.9	-
Richmond-San Rafael Bridge Retrofit	307.9	-	307.9	302.0	307.9	-
<u> </u>	124.0	(7.0)	127.0	104.7	127.0	
Capital Outlay Support	134.0	(7.0)	127.0	126.7	127.0	-
Capital Outlay Construction Total	780.0 914.0	(90.5) (07.5)	689.5 816.5	667.5 794.2	689.5 816.5	-
Benicia-Martinez Bridge Retrofit	914.0	(97.5)	0.010	194.2	0.010	
~	38.1		38.1	38.1	38.1	-
Capital Outlay Support Capital Outlay Construction	139.7	-	139.7	139.7	139.7	-
Total	139.7	-	177.8	177.8	139.7	-
	177.0	-	177.8	177.0	1/7.0	-
Carduinez Bridge Retrofit	20.7		20.7	20.0	20.7	
Capital Outlay Support	28.7	-	28.7	28.8	28.7	-
Capital Outlay Construction Total	85.5	-	85.5	85.4	85.5	-
	114.2	-	114.2	114.2	114.2	-
San Mateo-Hayward Bridge Retrofit	20.1		20.1	20.1	20.1	-
Capital Outlay Support	28.1	-	28.1	28.1	28.1	-
Capital Outlay Construction	135.4	-	135.4	135.3	135.4	-
Total	163.5	-	163.5	163.4	163.5	-
Vincent Thomas Bridge Retrofit (Los Angeles)						
	14 /		14 /	16.4	14 /	
Capital Outlay Support	16.4	-	16.4		16.4	-
Capital Outlay Construction Total	42.1	-	42.1 58.5	42.0 59.4	42.1	-
San Diego-Coronado Bridge Retrofit	58.5	-	38.5	58.4	58.5	-
Capital Outlay Support	33.5		33.5	33.2	33.5	
Capital Outlay Support Capital Outlay Construction	70.0	-	70.0	69.4	70.0	-
Total	103.5	-	103.5		103.5	-
ı Uldı	103.5	-	103.3	102.6	103.5	-
Subtotal Capital Outlay Support	1,433.1	(7.0)	1,426.1	1,188.5	1,666.9	240.8
Subtotal Capital Outlay	6,286.8	220.6	6,507.4	4,576.9	6,860.8	353.4
Subtotal Other Budgeted Capital	35.1	(3.3)	31.8	0.7	1.1	(24.1)
Miscellaneous Program Costs	30.0		30.0	24.7	30.0	
Subtotal Toll Bridge Seismic Retrofit Program	7,785.0	210.3	7,995.3	5,790.8	8,565.4	570.1
Programatic Risk	-	_	-	-	83.9	83.9
Program Contingency	900.0	(210.3)	689.7	-	35.7	(654.0)
Total Toll Bridge Seismic Retrofit Program	8,685.0	-	8,685.0	5,790.8	8,685.0	- 1000000000000000000000000000000000000
Note: Details may not sum to totals due to rou	nding effects.					

Appendix A-2: TBSRP AB 144/SB 66 Baseline Budget, Forecasts and Expenditures Through May 31, 2009

	AB 144 Baseline	Exp	penditures to date and Encumbrances as of Jun 2009	Estimated Costs not yet Spent or Encumbered	Total Forecast
Bridge	Budget	Approved Budget	See Note (1)	as of May 2009	as of Jun 2009
a	b	C	d	e	f = d + e
Other Completed Projects					
Capital Outlay Support	144.9	144.9	144.6	0.3	144.9
Capital Outlay	472.6	472.6	472.6	0.1	472.7
Total	617.5	617.5	617.2	0.4	617.6
Richmond-San Rafael					
Capital Outlay Support	134.0	127.0	126.7	0.3	127.0
Capital Outlay	698.0	689.5	674.8	14.7	689.5
Project Reserves	82.0	-	-	-	-
Total	914.0	816.5	801.5	15.0	816.5
West Span Retrofit					
Capital Outlay Support	75.0	75.0	74.8	0.2	75.0
Capital Outlay	232.9	232.9	232.7	0.2	232.9
Total	307.9	307.9	307.5	0.4	307.9
West Approach					
Capital Outlay Support	120.0	120.0	116.6	0.4	117.0
Capital Outlay	309.0	350.7	342.9	(2.2)	340.7
Total	429.0	470.7	459.5	(1.8)	457.7
SFOBB East Span -Skyway				(2.1)	
Capital Outlay Support	197.0	181.0	181.5	(0.4)	181.1
Capital Outlay	1,293.0	1,254.1	1,412.1	(158.0)	1,254.1
Total	1,490.0	1,435.1	1,593.6	(158.4)	1,435.2
SFOBB East Span -SAS- Superstructure	0111	0111	454.0	050.4	140.01
Capital Outlay Support	214.6	214.6	154.3	258.6	412.9
Capital Outlay	1,753.7	1,753.7	1,649.6	409.0	2,058.6
Total	1,968.3	1,968.3	1,803.9	667.6	2,471.5
SFOBB East Span -SAS- Foundations	/25	41.0	27 /	1.0	20.7
Capital Outlay Support	62.5	41.0	37.6	1.0	38.6
Capital Outlay	339.9	307.3	308.7	(1.4)	307.3
Total	402.4	348.3	346.3	(0.4)	345.9
Small YBI Projects	10.6	10.6	10.1	0.5	10 /
Capital Outlay Support					10.6
Capital Outlay Total	15.6 26.2	15.6 26.2	16.6 26.7	(0.9)	15.7
YBI Detour	20.2	20.2	20.7	(0.4)	26.3
	29.5	66.0	65.0	20.5	85.5
Capital Outlay Support	29.5 131.9	492.8	442.4		
Capital Outlay Total	161.4	558.8	507.4	100.2	542.6
YBI - Transition Structures	101.4	330.0	307.4	120.7	628.1
Capital Outlay Support	78.7	78.7	16.4	89.1	105.5
Capital Outlay	299.4	276.1	0.1	285.8	285.9
Total	378.1	354.8	16.5	374.9	391.4
Oakland Touchdown	370.1	334.0	10.5	374.9	371.4
	7.1.1	74.4	50.0	26.4	95.3
Capital Outlay Support Capital Outlay	74.4 283.8	74.4 283.8	58.9 218.0	71.8	289.8
Total	358.2	358.2	276.9	108.2	385.1
East Span Other Small Project	330.2	330.2	270.9	100.Z	303.1
Capital Outlay Support	212.3	213.3	205.8	7.7	213.5
Capital Outlay	170.8	170.8	94.0	52.6	146.6
Total	383.1	384.1	299.8	60.3	360.1
Existing Bridge Demolition	303.1	J04.1	277.0	00.5	300.1
Capital Outlay Support	79.7	79.7	0.4	59.6	60.0
Capital Outlay	239.2	239.2	-	232.1	232.1
Total	318.9	318.9	0.4	291.7	292.1
10(a)	310.7	J 10.7	0.4	271.7	272.1
Miscellaneous Program Costs	30.0	30.0	25.1	4.9	30.0
Total Capital Outlay Support (2)	1,463.2	1,456.2	1,217.8	4.7	1,696.9
Total Capital Outlay	6,321.8	6,539.1	5,864.5	1,004.0	6,868.5
Program Total	7,785.0	7,995.3	7,082.3	1,483.1	8,565.4
. rogium roun	1,100.0	1,773.3	1,002.3	,403.1	0,303.4

^{(1).} Funds allocated to project or contract for Capital Outlay and Support needs includes Capital Outlay Support total allocation for FY 06/07.

Notes: * Budget for Richmond-San Rafael Bridge includes \$16.9 million of deck joint rehabilitation work that is considered to be eligible for seismic retrofit program funding.

^{(2).} BSA provided a distribution of program contingency in December 2004 based on Bechtel Infrastructure Corporation input.

This column is subject to revision upon completion of Department's risk assessment update.

^{(3).} Total Capital Outlay Support includes program indirect costs.

Appendix B: TBSRP (SFOBB East Span Only) AB 144/SB 66 Baseline Budget, Forecasts and Expenditures Through June 30, 2009

Contract	EA Number	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (06/2009)	Cost To Date (05/2009)	Cost Forecast (06/2009)	At- Completio n Variance
а	b	С	d	e = c + d	f	g	h = g - e
San Francisco-Oakland Bay Bridge East Span Replacement Project							
East Span - Skyway	01202X						
Capital Outlay Support	012027	197.0	(16.0)	181.0	181.1	181.1	0.1
Capital Outlay Construction		1,293.0	(38.9)	1,254.1	1,236.8	1,254.1	-
Total		1,490.0	(54.9)	1,435.1	1,417.9	1,435.2	0.1
East Span - SAS E2/T1 Foundations	0120EX		, ,				-
Capital Outlay Support		52.5	(21.5)	31.0	28.4	28.6	(2.4)
Capital Outlay Construction		313.5	(32.6)	280.9	275.0	280.9	-
Total		366.0	(54.1)	311.9	303.4	309.5	(2.4)
East Span - SAS Superstructure	0120FX						
Capital Outlay Support		214.6	-	214.6	152.6	4129	198 3
Capital Outlay Construction		1,753.7	-	1,753.7	718.3	2,058.6	304.9
Total	040001/	1,968.3	-	1,968.3	870.9	2,471.5	503.2
SAS W2 Foundations	0120CX	10.0		10.0	0.3	10.0	
Capital Outlay Support Capital Outlay Construction		10.0 26.4	-	10.0 26.4	9.2 25.8	10.0 26.4	-
Total		26.4 36.4	-	26.4 36.4	25.8 35.0	26.4 36.4	-
YBI South/South Detour	0120RX	30.4	-	30.4	33.0	30.4	-
Capital Outlay Support	UIZUKA	29.4	36.6	66.0	64.0	85.5	19.5
Capital Outlay Construction		132.0	360.8	492.8	329.0	542.6	49.8
Total		161.4	397.4	558.8	393.0	628.1	69.3
YBI Transition Structures (see notes		101.1	377.1	000.0	070.0	OZO.1	07.0
below)	0120PX				_		
Capital Outlay Support		78.7	-	78.7	24.4	105.5	26.8
Capital Outlay Construction		299.3	(23.2)	276.1	-	285.9	9.8
Total		378.0	(23.2)	354.8	24.4	391.4	36.6
* YBI- Transition Structures							
Contract No. 1							
Capital Outlay Support					5.2	65.1	
Capital Outlay Construction					-	223.2	
Total					5.2	288.3	
* YBI- Transition Structures							
Contract No. 2					2.0	22.4	
Capital Outlay Support Capital Outlay Construction					2.8	23.4 59.4	
Total					2.8	82.8	
* YBI- Transition Structures					2.0	02.0	
Contract No. 3 Landscape							
Capital Outlay Support					_	1.0	
Capital Outlay Construction					-	3.3	
Total					_	4.3	
below)	01204X						
Capital Outlay Support	012017	74.4	-	74.4	58.3	95.3	20.9
Capital Outlay Construction		283.8	-	283.8	171.5	289.8	6.0
Total		358.2	-	358.2	229.8	385.1	26.9
* OTD Submarine Cable	0120K4						
Capital Outlay Support					0.9	0.9	
Capital Outlay Construction					7.9	9.6	
Total					8.8	10.5	
* OTD No. 1 (Westbound)	0120L4						
Capital Outlay Support					33.6	50.4	
Capital Outlay Construction					163.6	211.8	
Total	0.7.5.				197.2	262.2	
* OTD No. 2 (Eastbound)	0120M4						
Capital Outlay Support					3.0	20.5	
Capital Outlay Construction					-	64.0 84.5	
Total	0120814				3.0	8/15	
* OTD Electrical Systems Capital Outlay Support	0120N4				0.8	1 5	
Capital Outlay Support Capital Outlay Construction					0.8	1.5 4.4	
Total					0.8	5.9	
Notes: YBI Transition Structures and Oa			4- D-4 1 O				

Appendix B: TBSRP (SFOBB East Span Only) AB 144/SB 66 Baseline Budget, Forecasts and Expenditures Through June 30, 2009 (continued)

Contract	EA Number	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (06/2009)	Cost To Date (05/2009)	Cost Forecast (06/2009)	At- Completio n Variance
a	b	С	d	e = c + d	f	g	h = g - e
Existing Bridge Demolition	01209X						
Capital Outlay Support		79.7	-	79.7	0.4	60.0	(19.7)
Capital Outlay Construction		239.2	-	239.2	-	232.1	(7.1)
Total		318.9	-	318.9	0.4	292.1	(26.8)
YBI/SAS Archeology	01207X						
Capital Outlay Support		1.1	-	1.1	1.1	1.1	-
Capital Outlay Construction		1.1	-	1.1	1.1	1.1	-
Total		2.2	-	2.2	2.2	2.2	-
YBI - USCG Road Relocation	0120QX						
Capital Outlay Support		3.0	-	3.0	2.7	3.0	-
Capital Outlay Construction		3.0	-	3.0	2.8	3.0	-
Total		6.0	-	6.0	5.5	6.0	-
YBI - Substation and Viaduct	0120GX						
Capital Outlay Support		6.5	-	6.5	6.4	6.5	-
Capital Outlay Construction		11.6	-	11.6	11.3	11.6	-
Total		18.1	-	18.1	17.7	18.1	-
Oakland Geofill	01205X						-
Capital Outlay Support		2.5	-	2.5	2.5	2.5	-
Capital Outlay Construction		8.2	-	8.2	8.2	8.2	-
Total		10.7	-	10.7	10.7	10.7	-
Pile Installation Demonstration Project	01208X						
Capital Outlay Support		1.8	-	1.8	1.8	1.8	-
Capital Outlay Construction		9.2	-	9.2	9.2	9.2	-
Total		11.0	-	11.0	11.0	11.0	_
Stormwater Treatment Measures	0120JX						
Capital Outlay Support		6.0	2.0	8.0	8.1	8.2	0.2
Capital Outlay Construction		15.0	3.3	18.3	16.7	18.3	-
Total		21.0	5.3	26.3	24.8	26.5	0.2
Right-of-Way and Environmental							
Mitigation	0120X9						
Capital Outlay Support		-	-	-	-	-	-
Capital Outlay & Right-of-Way		72.4	-	72.4	51.1	72.4	-
Total		72.4	-	72.4	51.1	72.4	-
Sunk Cost - Existing East Span Retrofit	04343X	& 04300X					
Capital Outlay Support		39.5	-	39.5	39.5	39.5	_
Capital Outlay Construction		30.8	-	30.8	30.8	30.8	-
Total		70.3	-	70.3	70.3	70.3	-
Other Capital Outlay Support		70.0		70.0	70.0	, 0.0	
Environmental Phase		97.7	_	97.7	97.7	97.7	-
Pre-Split Project Expenditures		44.9	_	44.9	44.9	44.9	_
Non-project Specific Costs		20.0	(1.0)	19.0	3.2	19.0	_
Total		162.6	(1.0)	161.6	145.8	161.6	_
Total		102.0	(1.0)	101.0	145.0	101.0	-
Subtotal Capital Outlay Support		959.3	-	959.3	726.3	1,203.1	243.8
Subtotal Capital Outlay Construction		4,492.2	269.4	4,761.6	2,887.6	5,125.0	363.4
Other Budgeted Capital		35.1	(3.3)	31.8	0.7	7.7	(24.1)
Total SFOBB East Span Replacement Pro	ject	5,486.6	266.1	5,752.7	3,614.6	6,335.8	583.1

Appendix C: Regional Measure 1 Program Cost Detail (\$ Millions)

Project	EA Number	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (06/2009)	Cost To Date (06/2009)	Cost Forecast (06/2009)	At- Completion Variance
a	b	С	d	e = c + d	f	g	h = g - e
lew Benicia-Martinez Bridge Project							
New Bridge	00603_						
Capital Outlay Support	00000_						
BATA Funding		84.9	6.9	91.8	91.7	91.8	-
Non-BATA Funding		-	0.1	0.1	0.1	0.1	-
Subtotal		84.9	7.0	91.9	91.8	91.9	-
Capital Outlay Construction				-			-
BATA Funding		661.9	94.6	756.5	753.8	756.5	-
Non-BATA Funding		10.1	-	10.1	10.1	10.1	-
Subtotal		672.0	94.6	766.6	763.9	766.6	-
Total		756.9	101.6	858.5	855.7	858.5	-
I-680/I-780 Interchange Reconstruction Capital Outlay Support	00606_						
BATA Funding		24.9	5.2	30.1	30.1	30.1	-
Non-BATA Funding		1.4	5.2	6.6	6.3	6.6	-
Subtotal		26.3	10.4	36.7	36.4	36.7	-
Capital Outlay Construction		- · -					
BATA Funding		54.7	26.9	81.6	77.1	81.6	-
Non-BATA Funding		21.6		21.6	21.7	21.6	-
Subtotal		76.3	26.9	103.2	98.8	103.2	-
Total		102.6	37.3	139.9	135.2	139.9	-
L COO/Marina Vista Interakanna Basanaturati		00005					
I-680/Marina Vista Interchange Reconstruction	on	00605_	4 7	20.0	20.0	20.0	
Capital Outlay Support		18.3	1.7	20.0	20.0	20.0	-
Capital Outlay Construction Total		51.5 69.8	4.9 6.6	56.4 76.4	56.1 76.1	56.4 76.4	
i Otai		09.6	0.0	70.4	70.1	70.4	-
New Toll Plaza and Administration Building	00604						
Capital Outlay Support	00001_	11.9	3.8	15.7	15.7	15.7	-
Capital Outlay Construction		24.3	2.0	26.3	25.1	26.3	-
Total		36.2	5.8	42.0	40.8	42.0	-
Existing Bridge & Interchange Modifications	0060A_						
Capital Outlay Support						I	
BATA Funding		4.3	13.5	17.8	16.3	17.8	-
Non-BATA Funding		-	0.9	0.9	0.8	0.9	-
Subtotal		4.3	14.4	18.7	17.1	18.7	-
Capital Outlay Construction						1	
BATA Funding		17.2	32.8	50.0	29.5	50.0	-
Non-BATA Funding		-	9.5	9.5		9.5	-
Subtotal		17.2	42.3	59.5	29.5	59.5	-
Total		21.5	56.7	78.2	46.6	78.2	-
Other Contracts	See note b		,				
Capital Outlay Support		11.4	(2.3)	9.1	8.3	9.1	-
Capital Outlay Construction		20.3	3.3	23.6	17.0	23.6	-
Capital Outlay Right-of-Way		20.4	(0.1)	20.3	17.0	20.3	-
Total		52.1	0.9	53.0	42.3	53.0	-
uhtatal DATA Canital Outlan Community		455.7	20.0	1045	400.4	1045	
ubtotal BATA Capital Outlay Support		155.7	28.9	184.5	182.1	184.5	-
ubtotal BATA Capital Outlay Construction		829.9	164.5	994.4	958.6	994.4	-
ubtotal Capital Outlay Right-of-Way		20.4	(0.1)	20.3	17.0	20.3	
ubtotal Non-BATA Capital Outlay Support		1.4	6.2	7.6	7.2	7.6	
ubtotal Non-BATA Capital Outlay Construction		31.7	9.5	41.2	31.8	41.2	
roject Reserves		20.8	3.7	24.5	-	24.5	-
otal New Benicia-Martinez Bridge Project		1,059.9	212.7	1,272.5	1,196.7	1,272.5	-
					·		

Appendix C: Regional Measure 1 Program Cost Detail (\$ Millions) (Continued)

Project	EA Number	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (06/2009)	Cost To Date (06/2009)	Cost Forecast (06/2009)	At- Completion Variance
a	b	С	d	e = c + d	f	g	h = g - e
							_
Carquinez Bridge Replacement Project							
New Bridge	01301_						
Capital Outlay Support		60.5	(0.3)	60.2	60.2	60.2	-
Capital Outlay Construction		253.3	2.7	256.0	255.9	256.0	-
Total		313.8	2.4	316.2	316.1	316.2	-
	0400=						
Crockett Interchange Reconstruction	01305_		(0.1)				
Capital Outlay Support		32.0	(0.1)	31.9	31.9	31.9	-
Capital Outlay Construction		73.9	(1.9)	72.0	71.9	72.0	-
Total		105.9	(2.0)	103.9	103.8	103.9	-
Eviation 4007 Bridge Dame little	04200						
Existing 1927 Bridge Demolition	01309_	10.1	(O E)	15.0	15.0	15.0	
Capital Outlay Support		16.1	(0.5)	15.6	15.6	15.6	-
Capital Outlay Construction		35.2	- (0.5)	35.2	34.8	35.2	-
Total		51.3	(0.5)	50.8	50.4	50.8	-
Other Contracts	See note b	elow					
Capital Outlay Support		15.8	1.2	17.0	16.3	17.0	-
Capital Outlay Construction		18.8	(1.2)	17.6	16.1	17.6	-
Capital Outlay Right-of-Way		10.5	(0.1)	10.4	9.9	10.4	-
Total		45.1	(0.1)	45.0	42.3	45.0	_
. • • • • • • • • • • • • • • • • • • •		10.1	(0.1)	-10.0	12.0	10.0	
Subtotal BATA Capital Outlay Support		124.4	0.3	124.7	124.0	124.7	-
Subtotal BATA Capital Outlay Construction		381.2	(0.4)	380.8	378.7	380.8	-
Subtotal Capital Outlay Right-of-Way		10.5	(0.1)	10.4	9.9	10.4	-
Project Reserves		12.1	(9.8)	2.3	-	2.3	-
Total Carquinez Bridge Replacement Project		528.2	(10.0)	518.2	512.6	518.2	-
Notes:				1304_,01305_, 01306_ 00607_, 2A270_, and			OC_, 0130D_,

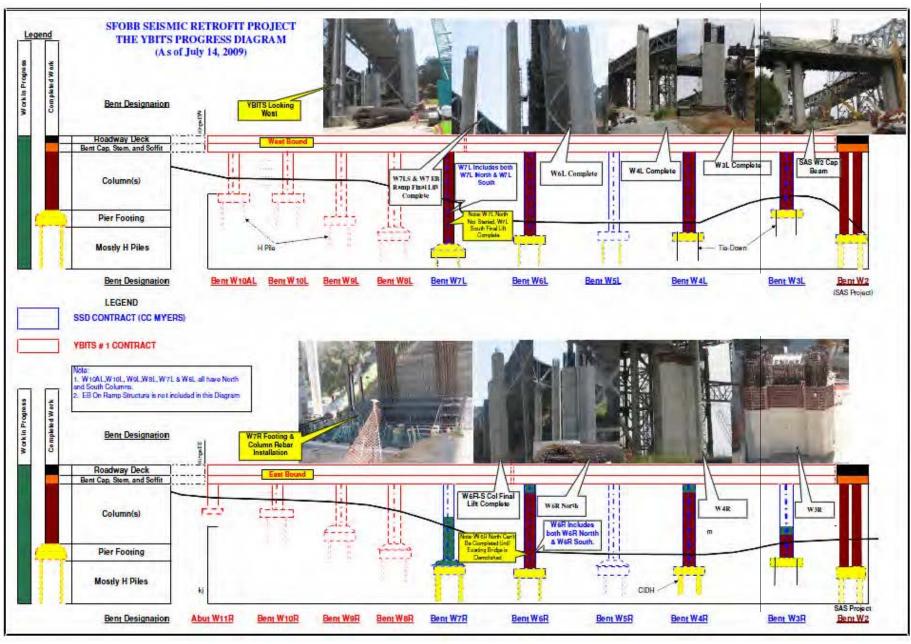
Appendix C: Regional Measure 1 Program Cost Detail (\$ Millions) (Continued)

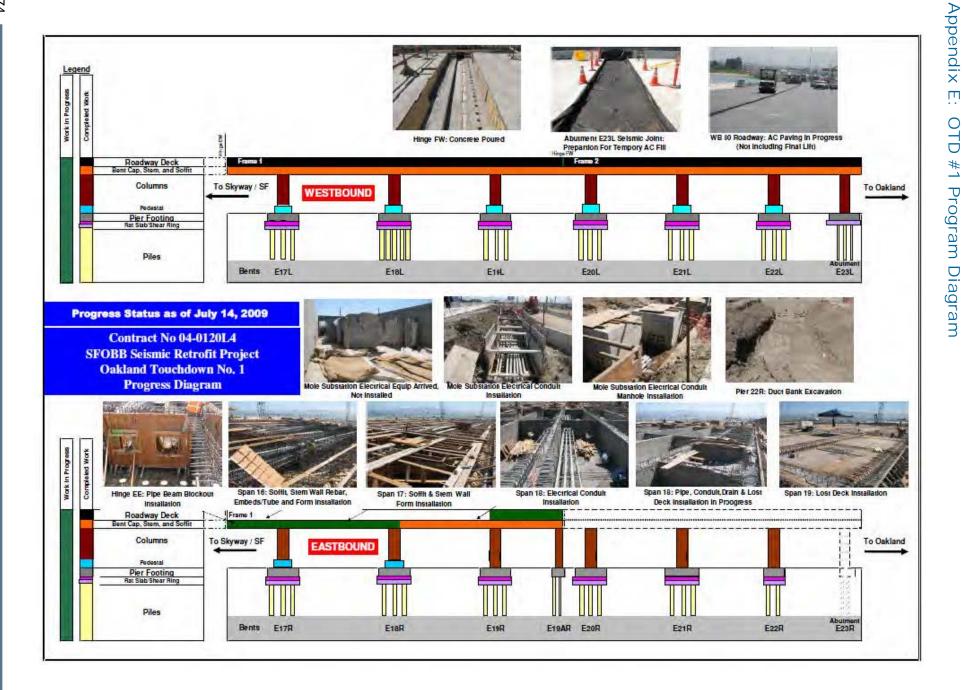
Project	EA Number	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (06/2009)	Cost To Date (06/2009)	Cost Forecast (06/2009)	At- Completion Variance
<u>a</u>	b	С	d	e = c + d	f	g	h = g - e
Richmond-San Rafael Bridge Trestle, Fender, and Deck	Loint Pehabilita	tion	See note 1 bel	OW			
Capital Outlay Support	John Renabilita	lion	Sec note bei	OW			
BATA Funding		2.2	(0.8)	1.4	1.4	1.4	-
Non-BATA Funding		8.6	1.8	10.4	10.4	10.4	-
Subtotal		10.8	1.0	11.8	11.8	11.8	-
Capital Outlay Construction							
BATA Funding		40.2	(6.8)	33.4	33.4	33.4	-
Non-BATA Funding		51.1	-	51.1	51.1	51.1	-
Subtotal		91.3	(6.8)	84.5	84.5	84.5	-
Project Reserves		-	0.8	0.8	-	0.8	-
Total		102.1	(5.0)	97.1	96.3	97.1	-
J							
Rehabilitation	04152_						
Capital Outlay Support							
BATA Funding		4.0	(0.7)	3.3	3.3	3.3	-
Non-BATA Funding		4.0	(4.0)	-	-	-	-
Subtotal		8.0	(4.7)	3.3	3.3	3.3	-
Capital Outlay Construction		16.9	(0.6)	16.3	16.3	16.3	-
Project Reserves		0.1	0.3	0.4	-	0.4	-
Total	Non Caltuana	25.0	(5.0)	20.0	19.6	20.0	-
Richmond Parkway Project (RM 1 Share Only)	Non-Caltrans			-		_	
Capital Outlay Support		- 5.9	-	5.9	4.2	- 5.9	-
Capital Outlay Construction Total		5.9	-	5.9	4.3 4.3	5.9	-
San Mateo-Hayward Bridge Widening	See note 2 be		-	5.9	4.3	5.9	-
Capital Outlay Support	See note be	34.6	(0.5)	34.1	34.1	34.1	-
Capital Outlay Support Capital Outlay Construction		180.2	(6.1)	174.1	174.1	174.1	-
Capital Outlay Right-of-Way		1.5	(0.1)	0.6	0.5	0.6	-
Project Reserves		1.5	(0.5)	1.0	0.5	1.0	_
Total		217.8	(8.0)	209.8	208.7	209.8	-
I-880/SR-92 Interchange Reconstruction	EA's 23317_,		, ,	207.0	200.7	207.0	
Capital Outlay Support	L713 200 17_,	28.8	34.6	63.4	48.1	63.4	-
Capital Outlay Construction		20.0	0 110	33.1	1011	00	
BATA Funding		85.2	60.2	145.4	68.6	145.4	-
Non-BATA Funding		9.6	-	9.6		9.6	-
Subtotal		94.8	60.2	155.0	68.6	155.0	-
Capital Outlay Right-of-Way		9.9	7.0	16.9	11.7	16.9	-
Project Reserves		0.3	9.4	9.7		9.7	-
Total		133.8	111.2	245.0	128.4	245.0	-
Bayfront Expressway Widening	EA's 00487_,	01511_, and					
Capital Outlay Support		8.6	(0.2)	8.4	8.3	8.4	-
Capital Outlay Construction		26.5	(1.5)	25.0	24.9	25.0	-
Capital Outlay Right-of-Way		0.2	-	0.2	0.2	0.2	-
Project Reserves		0.8	(0.3)	0.5	-	0.5	-
Total		36.1	(2.0)	34.1	33.4	34.1	-
US 101/University Avenue Interchange Modification	Non-Caltrans						
Capital Outlay Support		3.8	-	2.0	3.7	- 2.0	-
Capital Outlay Construction			-	3.8		3.8	-
Total		3.8	-	3.8	3.7	3.8	-
Subtotal BATA Capital Outlay Support		250.2	414	410.0	401.2	410.0	
		358.3	61.6	419.8	401.3	419.8	-
Subtotal BATA Capital Outlay Construction		1,569.8	209.3	1,779.1	1,662.6	1,779.1	-
Subtotal Capital Outlay Right-of-Way		42.5	5.9	48.4	39.3	48.4	-
Subtotal Non-BATA Capital Outlay Support		14.0	4.0	18.0	17.6	18.0	-
Subtotal Non-BATA Capital Outlay Construction		92.4	9.5	101.9	82.9	101.9	-
Project Reserves Total RM1 Program		35.6 2,112.6	3.6 293.9	39.2 2,406.4	- 2,203.7	39.2 2,406.4	-

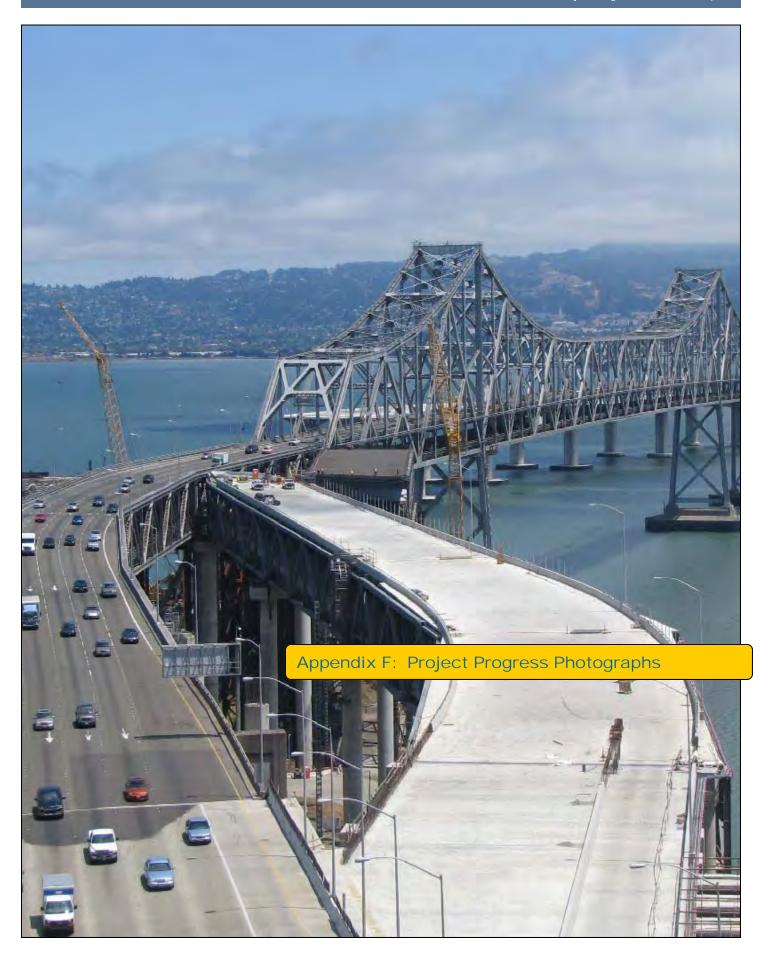
otes:

1 Richmond-San Rafael Bridge Trestle, Fender, and Deck Joint Rehabilitation Includes Non-TBSRA Expenses for EA 0438U_
04157_

2 San Mateo-Hayward Bridge Widening Includes EA's 00305_, 04501_, 04502_, 04503_, 04504_, 04505_, 04506_, 04507_, 04508_, 04509_, 27740_, 27790_, 04860_







Appendix F: Project Progress Photographs

Yerba Buena Island Detour



Prep for Roll Out-Roll In



Upper Deck of the East Tie-In Truss



Skid System

Appendix F: Project Progress Photographs

Self-Anchored Suspension Bridge Fabrication



South Tower Lifts 1 and 2 Being Trial Assembled



East Tower—Lifts 1 and 2 Being Trail Assembled



Close Rib Splice Connection for Joining OBT Segments together



View Showing OBG Lifts 1,2,3 and Cross Beam

Self-Anchored Suspension Bridge Fabrication Cont.



Tower Shaft



OBG Crossbeam for OBG Lifts 1 through 4



OBG Deck Segment



OBG Deck with Lifting Mechanism Being Installed

Appendix F: Project Progress Photographs

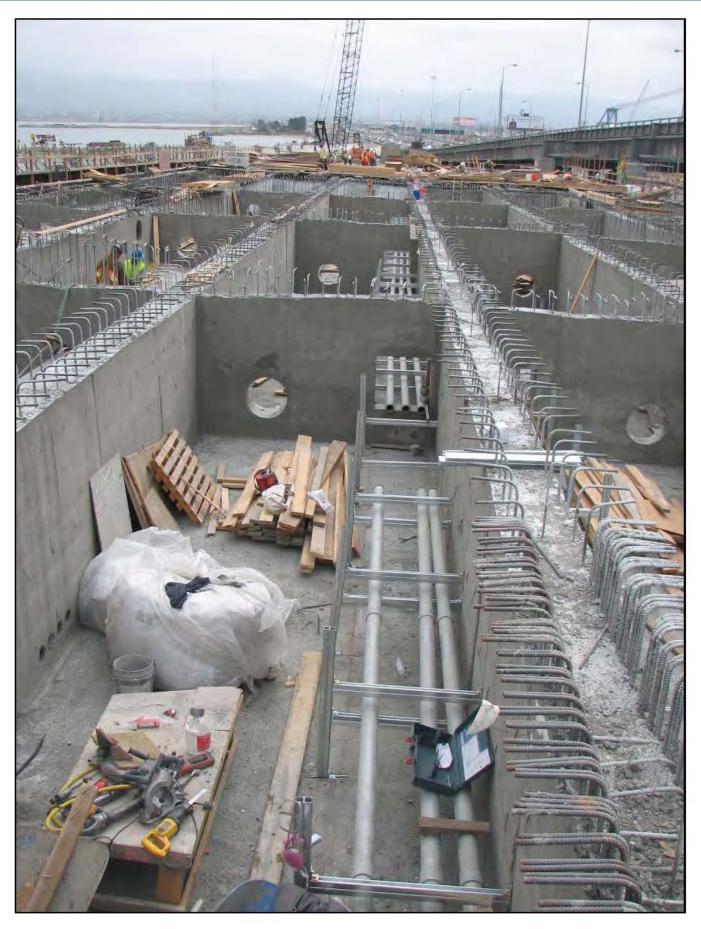
Oakland Touchdown



OTD1 Hinge EE Rear and Hinge Pipe Blockout Installation



OTD Sample Light Poles



OTD Span18 Conduit Installation

Appendix F: Project Progress Photographs

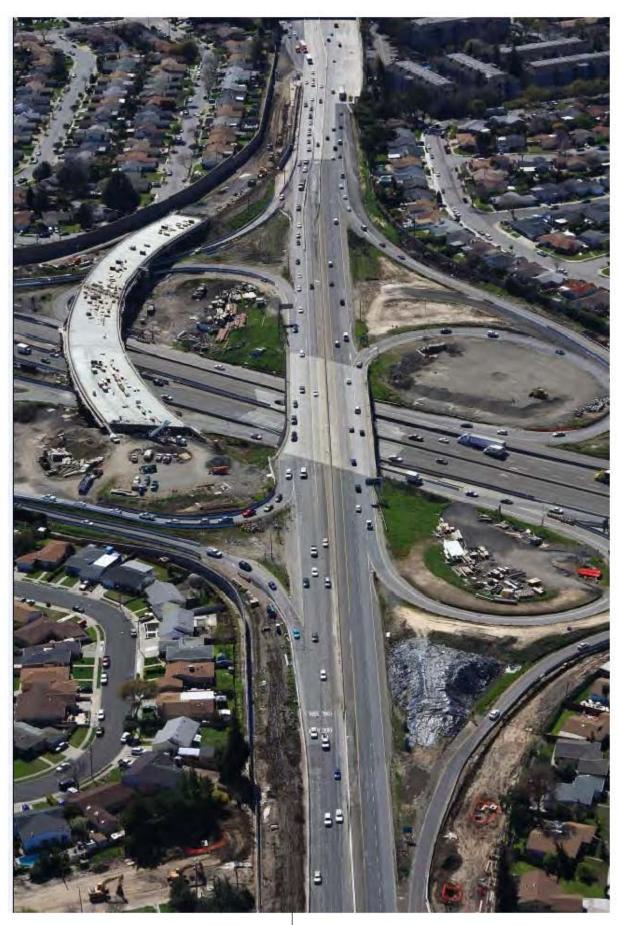
92/880 Interchange



Paving Operation on Eastbound 92



ENCONN Bridge



Overview of 92/880 Interchange

Appendix G: Glossary of Terms

AB144/SB 66 BUDGET: The planned allocation of resources for the Toll Bridge Seismic Retrofit Program, or subordinate projects or contracts, as provided in Assembly Bill 144 and Senate Bill 66, signed into law by Governor Schwarzenegger on July 18, 2005 and September 29, 2005, respectively.

BATA BUDGET: The planned allocation of resources for the Regional Measure 1 Program, or subordinate projects or contracts as authorized by the Bay Area Toll Authority as of June 2005.

APPROVED CHANGES: For cost, changes to the AB144/SB 66 Budget or BATA Budget as approved by the Bay Area Toll Authority Commission. For schedule, changes to the AB 144/SB 66 Project Complete Baseline approved by the Toll Bridge Program Oversight Committee, or changes to the BATA Project Complete Baseline approved by the Bay Area Toll Authority Commission.

CURRENT APPROVED BUDGET: The sum of the AB144/SB66 Budget or BATA Budget and Approved Changes.

COST TO DATE: The actual expenditures incurred by the program, project or contract as of the month and year shown.

COST FORECAST: The current forecast of all of the costs that are projected to be expended so as to complete the given scope of the program, project, or contract.

AT COMPLETION VARIANCE or VARIANCE (cost): The mathematical difference between the Cost Forecast and the Current Approved Budget.

AB 144/SB 66 PROJECT COMPLETE BASELINE: The planned completion date for the Toll Bridge Seismic Retrofit Program or subordinate projects or contracts.

BATA PROJECT COMPLETE BASELINE: The planned completion date for the Regional Measure 1 Program or subordinate projects or contracts.

PROJECT COMPLETE CURRENT APPROVED SCHEDULE: The sum of the AB144/SB66 Project Complete Baseline or BATA Project Complete Baseline and Approved Changes.

PROJECT COMPLETE SCHEDULE FORECAST: The current projected date for the completion of the program, project, or contract.

SCHEDULE VARIANCE or VARIANCE (schedule): The mathematical difference expressed in months between the Project Complete Schedule Forecast and the Project Complete Current Approved Schedule.

COMPLETE: % Complete is based on an evaluation of progress on the project, expenditures to date, and schedule.



Memorandum

TO: Toll Bridge Program Oversight Committee DATE: July 30, 2009

(TBPOC)

FR: Tony Anziano, Toll Bridge Program Manager, Caltrans

RE: Agenda No. - 4a

Item- San Francisco-Oakland Bay Bridge Updates

Bridge Light Poles

Recommendation:

APPROVAL

Cost:

Approximately \$16 million for Break Bent Poles or \$36 million for Welded Poles

Schedule Impacts:

No schedule impacts.

Discussion:

It is requested that the TBPOC approve the Break Bent Poles (\$16M).

Four poles were constructed during the Oakland Touchdown Project, two were Break Bent Poles and two were Welded Poles. During this work several fabrication issues were discovered and resolved with both types of poles. The poles were reviewed in the field by PMT members and TBPOC members with a consensus that the Break Bent Poles were the poles to build. The Break Bent Poles are straighter and easier to construct.

Attachment(s):

- 1. Break Bent Poles write-up and cost estimate
- 2. Welded Pole write-up and cost estimate

Break Bent Poles

This pole is the easiest pole to construct and therefore the cheapest to purchase. One of the issues with this pole is matching the three thickness of steel along the length of the pole. With this method of construction it's hard to bend different thickness of steel and have the same radius for the corners. We plan to specify a mock-up in the DGS contract and require the contractor to meet a tolerance for these joints. The other improvement that we will make in the DGS contract is to hide the weld joints by sanding down the galvanizing or putting a filler over the joint before painting. This is actually an issue with either type of pole and will be addressed on the DGS contract.

Cost of constructing these poles is as follows. Stratus the fabricator in Fort Worth has given us some information on the 2ea. - 20 meter break bent poles and the cost for these is about \$80,000 per pole.

20	Meter Poles	66ea	\$80K	\$5,280,000
17.5	Meter Poles	14ea	\$75K	\$1,050,000
15	Meter Poles	16ea	\$70K	\$1,120,000
12	Meter Poles	23ea	\$60K	\$1,380,000
10	Meter Poles	32ea	\$55K	\$1,760,000
7	Meter poles	78ea	\$50K	\$3,900,000
		229ea		
Total	Pole Estimate			\$14,490,000
Cont	ingency 10%			\$ 1,449,000
Total	-			\$15,939,000

Welded Poles

The welded pole is more difficult to build and harder to keep straight along the length of the pole. The difference in this pole is that it has 7 welds the full length of the pole and this creates distortion due to the large amount of weld heat. The second issue with achieving straightness is trying to keep all 15 plates in alignment during the welding process. The fabrication contract would have to specify what would be allowed for straightness and reject noncompliant poles. This would require rejection of poles and a possible claim stating impossible fabrication. With all the welding required on this pole there will be an issue with galvanizing. Galvanizing sticks to the weld material more than the base metal and will have to be addressed in the DGS contract. Clive Endress, the architect, wanted sharper edges and this pole with some changes to the specification can achieve a sharper edge.

Cost estimate is based on the building 2ea.-20 meter poles and the cost for these is \$160,000 per pole.

20	Meter Poles	66ea	\$160K	\$10,560,000
17.5	Meter Poles	14ea	\$150K	\$2,100,000
15	Meter Poles	16ea	\$140K	\$2,240,000
12	Meter Poles	23ea	\$120K	\$2,760,000
10	Meter Poles	32ea	\$110K	\$3,520,000
7	Meter poles	78ea	\$100K	\$7,800,000
	-	229ea		
Total	l Pole Estimate			\$28,980,000
Cont	ingency 25%			\$ 7,245,000
Total	[\$36,225,000



Memorandum

TO: Toll Bridge Program Oversight Committee DATE: July 30, 2009

(TBPOC)

FR: Program Management Team

RE: Agenda No. - 4b1

Item- San Francisco-Oakland Bay Bridge Updates

SAS – TBPOC China & Canada Visit Preparations

Recommendation:

For Information Only

Cost:

N/A

Schedule Impacts:

N/A

Discussion:

Attached is the draft itinerary for the TBPOC visit to China and Canada August 24 - 28, 2009. Below is a summary of the draft itinerary:

Sun, Aug 23	Suggested travel to Vancouver
Mon, Aug 24	Meeting at Candraft in Vancouver
Tues, Aug 25	Travel to Shanghai
Wed , Aug 26	Arrive in Shanghai
Thurs, Aug 27	Visit ZPMC facilities on Changxing Island
Fri, Aug 28	Meeting with Mr Guan, ZPMC, in Pudong
Sat, Aug 29	Return to CA

Attachment(s):

1. TBPOC Draft Itinerary for China/ Canada Visit, August 24 – 28, 2009

		<u>Augus</u>		hina / Canada M			
	8/23/2009	8/24/2009	8/25/2009	8/26/2009	8/27/2009	8/28/2009	8/29/2009
	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			Age	enda			
Morning		Candraft Office 19550 92nd Ave. Surrey, BC V4N 4G7			Tour of ZPMC facilities; pre-meetings Changxing Island	Mtg w/ Mr Guan Pudong	
Afternoon			Depart Vancouver Air Canada FI# AC025 Depart: 11:00 Arrive: Wed 14:15	Arrive Shanghai Arrive: 14:15			Depart Shanghai Arrive SFO United FI# UA858 Depart: 12:25 Arrive: 8:29A
Evening	Arrive Vancouver						
		•	Accomn	nodations			
airmont Waterfront	Fairmont Waterfront 900 Canada Place Way Vancouver, BC V6C 3L5, Canada (866) 840-8402	Fairmont Waterfront					
IW Marriott Shanghai				JW Marriott Shanghai 399 Nanjing West Road Shanghai, 200003 China Phone: 86 21 53594969	JW Marriott Shanghai	JW Marriott Shanghai	
			Attendees and F	Flight Information			
		(0.11)					
	Confirmation Number:	(Caltrans)					
Randy Iwasaki Director	50998278						
Fony Anziano Program Manager	Confirmation Number: 50998269						
Ken Terpstra	Confirmation Number:		N/A	N/A	N/A	N/A	N/A
Project Manager	50998258						
Pete Siegenthaler Team China Mgr	Confirmation Number: 50998275						
California Transpor	tation Commission						
Bimla Rhinehart	Confirmation Number:						
Executive Director	50998238						
Stephen Maller Deputy Director	Confirmation Number: 50998228						
Dina Noel Associate Deputy Director	Confirmation Number: 50998221						
Bay Area Toll Autho	ority (BATA)						
Steve Heminger Executive Director	Confirmation Number: 50998212						
Andrew Fremier Deputy Executive Director	Confirmation Number: 50998218						

ITEM 5: OTHER BUSINESS

No Attachments